The Journal of the Michigan State Medical Society

PUBLISHED UNDER THE DIRECTION OF THE COUNCIL

VOL. IV DETROIT, MICHIGAN, AUGUST, 1905 No. 8

Original Articles

THE PAST AND PRESENT STATUS OF THE MEDICAL PROFESSION IN MICHIGAN.*

B. D. HARISON,
Sault Ste. Marie.

It is not my purpose or desire to take advantage of this opportunity to detain you with or to inflict upon you a very technical address, but rather my endeavor is to bring before you in as concise and simple a manner as possible those practical and everyday facts relative to our professional status in Michigan of moment and interest and which concern us all, even to the most modest member, as well as to the member who delights in the scientific and technical side of our professional well-being. And in this connection I desire to review and comment as briefly as possible upon the past and recent accomplishments made in this state, having in view the unification and elevation of the profession of medicine as a whole, and to call your attention to and to enlist, if possible, your interest and support in measures whose objects are future advancement in the line of professional status.

*President's Address. Read at the annual meeting of the Michigan State Medical Society at Petoskey, June 28, 1905.

Two of my immediate predecessors in office, Doctors Connor and Bulson, covered very thoroughly in their addresses the two very important divisions in the history of this Society, namely: Dr. Connor from the date of its birth in Detroit, August 10, 1819, up to the date of its re-organization in Port Huron, June 27, 1902; and Dr. Bulson the important facts in connection with and the progress made within the year, the result of such re-organization, the facts of which are familiar to you all.

FORCES ORIGINATING OR RESPONSIBLE FOR MEDICAL STATUS.

There are three principal and direct forces governing, controlling and advancing the status of the medical profession in a state, namely:

First—The Legislature, represented by the State Medical Board.

Second—The state medical colleges, and the quality and character of their product.

Third—The members of the profession represented by the medical societies in the state.

First: The status resulting from the State Medical Board.

Howell Medical Act of 1883.

Period of free trade in medicine previous to 1883. As you are all aware, previous to 1883 there was no legislative restriction in the practice of medicine in Michigan. All the law required to legally practice medicine, and therefore have the legal standing of a physician and surgeon, was that the person so practicing should hold himself out to the public as a physician and surgeon. The law did not require a physician to have any medical training or experience in the profession in which he practiced or in which he attempted to practice. It was quite legal under the law for any one to use the prefix "Doctor" to his name, or to affix the letters "M. D." or the title "physician and surgeon" to his or her name. If so inclined a street fakir, a chimney-sweep, a scavenger, or a tramp could legally hang out his shingle without any medical qualifications attained in the usual method, and thereby was entitled to sign death certificates, give expert testimony in court, commit helpless people to lunatic asylums, or to do the hundred and one things that a regularly educated physician and surgeon is privileged to do today under the present medical law. In other words, we had "free trade" in medicine in this state.

During the legislative session of 1883, Dr. George Howell, representing Lenawee District in the House of Representatives, introduced a bill which is now known as the "Howell Medical Act," entitled "A Bill to Promote Public Health." This bill was passed by both houses of the legislature, and arrived at the hands of the Governor for his signature in a dilapidated and mutilated condition, so much so that the author, Dr. Howell, almost failed to recognize his creation after it had received the signature of the Governor. There were two sections to this bill, the first section providing that every person in this state who was actually engaged in the practice of medicine at the time the bill went into effect, September 7, 1883, and who had been continuously and immediately preceding the passage of the act for five years in the practice of medicine in this state, or who held himself or herself out as a practitioner of medicine without regard to any qualifications whatever, should be entitled to register upon making an affidavit in accordance with above quoted facts, within three months after September 7, 1883, the date upon which the act went into effect.

Section two provided that a graduate of a legally authorized medical college in this state, or within any one of the United States, or in any other country, could register upon making an affidavit covering the facts in his case before the clerk of the county in which he was or intended practicing. Under this law the county clerk, being simply a ministerial officer and having no judicial or semi-judicial powers under the act, was forced to accept and record every affidavit presented to him, no matter whether the person so registered had any qualifications or not.

So little was known under this act as to what constituted the qualifications for registration, even by attorneys, and the enforcement of such act by prosecuting attorneys was so entirely neglected, that it was possible to register, practice medi-

cine, sign death certificates, and give expert testimony in court upon a certificate of almost any kind, whether dental, pharmaceutical, or even on registration as an undergraduate or student. An applicant in Saginaw for re-registration offered as evidence of his legal registration under the old act a dental diploma upon which he had been practicing medicine for several years. When it was pointed out to him that the diploma was dental, not medical, he was dazed for a time and said: "It is very funny; I paid for the other kind and supposed I had it."

PERIOD OF LEGALIZED "FREE TRADE" IN MEDICINE, 1883-1899.

As could have been expected under such a lax system of registration and the impracticable judicial supervision of the same, "all sorts and conditions" of the genus medicus registered under the 1883 act, some with legal qualifications, others with fancied legal qualifications, a great many knowingly with no legal qualifications whatever. This method of registration was a direct bid, and was also to a large degree responsible for the origin and growth of the numerous "fake" and diploma-selling institutions in neighboring states, particularly in Illinois, where they obtained charters to conduct medical colleges, so-called, and issued "diplomas" to persons who never spent a day in the study of medicine, and these diplomas were simply sold to the highest bidder.

Michigan, during the life of the 1883 Act, was a favorite "dumping ground" for those persons who had obtained these fraudulent diplomas, and then registered under the Howell Act of 1883 as graduates of "legally authorized medical colleges" and previous to the passage of the Medical Act of 1899 it was generally conceded by lawyers and others interested, including the medical profession, that these possessors of infamous and bogus qualifications could so legally register under the provisions of the Howell Act, from the fact that the "fake" colleges from whom they obtained their diplomas were "legally authorized" in the states in which they were incorporated, notwithstanding the fact that these institutions as quickly as it became known of the fraudulent work they were doing were closed up by the attorney-general of the state; but no sooner had the attorney-general closed up one institution than another, or rather the same institution under another name and another charter, issued the same class of bogus diplomas.

The notorious Armstrong, of "Independent College" fame, who was convicted and sent to state's prison for issuing fradulent diplomas, and who was brought to time largely with the aid of the Michigan State Board of Registration, obtained from the Illinois legislature nine different charters. Under the law it took some two years' legal proceedings to close up one of these institutions, therefore he figured that he had eighteen years in which to issue bogus diplomas, at an annual income of some twenty-five thousand dollars, and Michigan was his best field from a business point of view.

CHANDLER MEDICAL ACT OF 1899.

At the legislative session of 1899 the Chandler Medical Bill was passed. This bill provided for a registration board of ten members, appointed by the Governor and confirmed by the Senate, and gave the board power to administer the act through its executive officer, the secretary.

Under this act provision was made to re-register all those practitioners in this state who were legally registered under the provisions of the Howell Act, and it also provided for future registrations from new men coming into the state, or students graduating from the different colleges, either by an examination before the board or through the "approved college" section, which provided that a graduate of a college recognized and listed by the board could obtain a certificate of registration or license by presenting his diploma for verification and record.

Under the Howell Act, as I have already noted, a graduate of a "legally authorized medical college," either in this state, the United States, or in any other country, was allowed to register. The title of this act was "A Bill to Promote Public Health." The board recorded at its first meeting its opinion that the legislature of 1883 in using the words "legally authorized medical college" intended also "reputable college," or, in other words, the sentence should read, "a graduate of a legally authorized and *reputable* medical college;" for if the legislature of 1883 did not intend that a legally authorized medical college should be "reputable," then the title of the act, "An Act to Promote Public Health," would have no force or meaning, for the people could not in any sense be protected or the public health improved or conserved if "fake" and disreputable colleges should come under the meaning, as expressed in the bill, "legally authorized medical college." The secretary, therefore, was directed to refuse to re-register all graduates of "fake" and disreputable colleges who had gone through the form of registering under this section; the board holding that affiants had simply gone through the *form* of registration without the *facts* required by law to make the form of registration legal.

One of the so-called graduates of the Independent Medical College of Chicago, the most notorious of all "fake" institutions in this country, who had gone through the *form* of registration under the old act, applied to the Supreme Court for a mandamus against the board in order to compel it to re-register him. This case was decided by the Supreme Court in favor of the board's interpretation of the law; consequently by this act of the board hundreds of disreputable and unqualified practitioners, who had gone through the form of registration under the old act, without the fact, were denied certificates of registration, and have either left the state, or, if still in this state, are not now imposing upon a credulous public.

Under this act of 1899 the board had authority to inspect and recognize, or to refuse recognition to, those United States colleges having at least a three years' course of eight months in each year or a four years' course of six months in each year, such recognition constituting a qualification for license without further examination. Graduates of non-recognized colleges and undergraduates could obtain a license under this act by passing an examination upon stated subjects before the board. This act did not specifically provide for a standard of preliminary and medical education as a qualification for entrance to or graduation from recognized medical colleges. It was recognized at the time of its passage that the Chandler Medical Bill was by no means a sufficient medical act, but as a beginning it more than fulfilled the

expectations not only of its promoters but of its enemies, the bogus diploma men, as well. Strange to relate, the latter supported it from the fact that they thought themselves secure through their registrations of form. During the period of this act, 1899-1903, a tremendous amount of medical housecleaning was done by the board, and if there are any unclean corners still in evidence, or medical cobwebs still unswept, it is due to circumstances over which the board has no control. The board endeavored to do justice to every one of the over six thousand applicants for re-registration without fear or favor, and that the conscientious performance of very difficult duties have been publicly recognized is demonstrated by the legislature from time to time since conferring additional powers and responsibilities upon the board. During this period organization was effected, and experience and intelligent observation and study during the three years of the administration of the Chandler Act prepared and educated the board for necessary and further advance in the matter of increased qualifications, both of preliminary and medical education for license to practice medicine in this state.

The following conditions were present at this period, and it is necessary to recite them at least briefly in order that the provisions, and system of enforcing such provisions, under the present law may be thoroughly comprehended and appreciated:

In 1882 there were 89 medical schools and 14,934 matriculants in the United States, and this number was increased in 1902 to 156 medical schools and to 27,501 matriculants. The number of medical graduates in 1882 was 4,015; in 1902, 5,002, an increase of at least 25 per cent. in twenty years. It is estimated that there is an average of one physician to 600 of the population of the United States. With the natural increase in the population and the deaths in the profession there would be required each year about 3,000 physicians, based upon the proportion of one physician to 600 of a population. With 5,000 graduates yearly a surplus of over 2,000 physicians annually is being thrown on the profession, overcrowding it and being directly responsible for many of the evils existing to-day in the profession.

Of the 156 medical schools, 126 are so-called regular schools, and 30 so-called sectarian. Of the 126 regular schools over 90 are private corporations or proprietory schools, organized, maintained and owned by the faculty.

The truly phenomenal evolution of medicine in the past few years has more than doubled the subjects of medical study, and the character of their increase has made it absolutely necessary to provide laboratory instruction in those subjects formerly taught almost wholly by didactic lectures. This involves an expense very greatly in excess of the cost of former methods, and means extensive buildings and costly apparatus, as well as a greatly increased and salaried teaching force. It has been estimated that the laboratory method of instruction in all of the really first-class medical schools averages from four to five hundred dollars per student annually.

As a consequence of the above, and the added facts that the legal requirements for license in the several states are being slowly and surely advanced in sympathy and consistent with this evolution or progress in medical science, the private or proprietory medical school is fighting

for existence. If they meet the present requirements they are no longer self-supporting. The tendency is then to conduct them upon a plane sufficient only to comply in form with state minimum requirements, and to use political influence and other questionable means for maintaining their status with medical boards. Their catalogues as a rule are marvelous productions of the ingenuity of man; and their published requirements, both of preliminary and medical education, are suggestive of the very highest standard. Some of them even pretend to give as high as 7,500 hours of actual work in a course as compared with the 4,000 hour standard of our State University. It will, of course, not surprise you when I affirm that a very large percentage of the 156 medical schools are not living up to their published requirements by a very large measure, and cannot possibly do so from the fact that their equipment and means will not permit it. In order to obtain students (otherwise fees) they admit to registration, nominally called matriculation, all applicants who are able to pay the fee, irrespective of their moral or mental qualification or fitness, and while in some instances they may go through the form of examining students for admission, and even condition such students in one or more of the published required branches, how often are these conditions fulfilled? A large proportion of them admit all classes of graduates to advanced standing, including the pharmacist, the veterinary surgeon, the dentist and the osteopath, so-called. Hundreds of these preliminary defective students are often at this time being accepted and registered as students in medicine, and are being graduated, or will be graduated in the future after a defective and intentionally deceptive medical course. The usual method in vogue by nearly every state medical board, of the general recognition of a college and the requirements of a stated qualification for entrance, will do little toward the limitation or exclusion of the product of such schools. The college is an adept at making a good showing at the proper time, and the stated qualification of a diploma from a high school, or its equivalent, can easily be complied with in form. There are a great many degrees of value in high school diplomas, and the equivalent qualification gives at least 100 per cent. of lee-way from the lowest quality of such diploma. It would be of immense advantage to the state and to the profession if students and graduates of this class could be cut out now and in the future, and I believe they represent in numbers as graduates fully 2,000 yearly, or an equal amount of the surplus of graduates complained of. The only feasible and practical method by which this can be accomplished is through uniformity of state requirements of both preliminary and medical qualifications and the absolute control by state boards of the standard with a proper method of enforcement and adminstration.

NOTTINGHAM MEDICAL ACT, 1903.

Acting on this knowledge and belief, the Nottingham Medical Act was introduced by the board and passed by the legislature of 1903. Section 3 of this act provides that after its passage all persons receiving a certificate of registration in Michigan must qualify for same as follows

First—Possessing as a qualification for registration in a recognized medical college a diploma from a recognized high

school, academy, college or university having a classical course, such diploma to be endorsed by the board as fulfilling its minimum standard of preliminary education, or that an applicant should pass this standard before the Board of Preliminary Examiners appointed by the State Medical Board.

Second—Graduation from a medical college recognized by the board as fulfilling its minimum published medical standard with a course of not less than four years of seven months in separate years. The present standard is four years of eight months in each year.

Third—Passing a satisfactory examination before the board upon stated subjects subsequent to medical graduation.

Of course graduates and matriculants whose diplomas and registration in recognized medical colleges date previous to the passage of the act (September 17, 1903) are exempted from its advanced requirements. It would be retroactive legislation to require a graduate of Harvard, for example, of twenty years ago, in order to qualify for the board's examination to fulfil present day standards or to require a student in the third year of a college to rematriculate, provided such graduate and matriculant had fulfilled the requirements of this state at the date of their graduation and matriculation. The legal point involved in the above exemption is most important. At present in no state in the Union is it fully recognized and given proper effect except in Michigan. For this reason in the recognition of colleges Michigan lists colleges in groups or classes: Group I including only colleges of the first grade whose standards fulfil in every particular the itemized standard, both of preliminary and medical education established by the board since September 16, 1903. Group II includes those colleges whose standards fulfil and equal the standard recognized in Michigan at the date of graduation and previous to the present advanced standard. Colleges in Group I naturally are also in Group II. If it were not for this method of grouping or classifying colleges, either present inferior colleges would have to be grouped on an equality with first-class colleges or it would only be possible for very recent graduates of a limited number of colleges to qualify for the State Board Examination for license in Michigan, and the qualified graduates of an extinct reputable college would be cut out of his just rights to the practice of medicine in this state. The third group consists of colleges whose courses only are recognized for advanced standing in colleges of the first-class under Group I.

Michigan has also a more advanced and practical method of recognizing and listing colleges than any other state in this country. She sets and publishes each year an itemized and minimum standard of preliminary and medical education, the former requiring a diploma or certificate representing an exact value. Nothing is left to guess work or supposition. The present minimum value of a literary diploma is a total of 15 units (a unit representing a school year of eight months' work and examination), including 9 required units: of English 3, Mathematics 3, Latin 2, Physics 1; and 6 elective units of German 2, French 2, Greek 2, English Literature 1, History 2, Chemistry 1, Botany 1, Zoology 1, Biology 1, Trigonometry 1, covering a course of four years of eight months in separate years. And the latter (medical education) repre-

senting a four-year course of not less than seven months in separate years, consisting of a total of 4,000 hours of work and examinations, divided into lectures, laboratory and clinics, the number and proportion of which are specified. The usual method of standard of a four-years' course of seven or more months in separate years is too indefinite for practical purposes. It may mean much or it may actually amount to very little.

Colleges are required to report to the board at least once a year, on forms provided, the details of their preliminary and medical standard in units and hours. Colleges are not listed permanently or until some cause is brought to light to disqualify them, but are only listed in the interim of board meetings. It has been found much easier to list a college for cause than to find or prove a cause for its unlisting.

It is one thing setting and publishing a high or sufficient standard of preliminary or medical education. It is quite a different proposition enforcing and maintaining such standard. The method adopted and used by Michigan is not only effective, but to some extent original as far as medical board work is concerned.

The following statement of the Chairman of the Special Committee on Matriculation, in the Announcement of the College of Physicians and Surgeons of Ontario, 1904-5, is noticed:

"Now in the State of Michigan a very high standard of examination is prescribed. It resembles very much our Senior Matriculation Examination. It looks very well on paper, but if you will look into these requirements you will find that matriculation at any university is accepted by that state and that nullifies their high standard. The same prevails in Ohio and other states except New York. I believe there is some reason why Ontario's certificate of qualification is not received in the later state, and we hope by the adoption of this report that our standard of matriculation will be placed on a higher basis than it ever has been and will fulfil the requirements even of New York State."

This statement is not founded on fact, and is I presume the result of want of proper information on the subject. By reference to Rules and Regulations relating to Standard of Preliminary Education and Examination issued by the board under "Preliminary Education," is the following:

"Resolved, That the following Minimum Standard of Preliminary Education be adopted as required in Sec. 3, Subdv. First (e), Act 191, Laws of 1903 * * * and no diploma or certificate issued by a high school, academy, college or university, or other institution, or by a board of examiners, shall be recognized by this board * * * unless in the opinion of the board such diploma or certificate fulfil the minimum standard of preliminary education established by the board, to wit:"

Then follows the preliminary standard of a minimum of 15 units of quality for a diploma or certificate.

You will note in this connection, therefore, that the diploma or certificate is only received by the board as preliminary evidence, not as final evidence of course and qualification. In other words, the diploma or certificate serves simply as an identification of the applicant, and in addition to this identification it is necessary for the applicant to furnish testimony, under oath, corroborated by certificate from the college or school authorities of the exact work and examinations ac-

complished in obtaining such diploma or certificate. Therefore, in place of the standard set by the board being modified, much less nullified, it is more accurately enforced, and the practical result is that the standard is higher and more uniform than its reading would indicate. The course demanded in the several subjects has a certain fixed and symmetrical value. For example, a candidate may present his units in required work, consisting of English 4 units, Mathematics 3 units, Latin 2 units, Physics 1 unit, with an addition of 5 elective units, total 15 units. As the units required in the standard are 15 it may naturally be supposed that the applicant has complied with the standard, but such is not the case. He has obtained a diploma or certificate from the result of an unsymmetrical course, and has obtained his extra unit in English at the expense of his elective work. His application is, therefore, rejected. In like manner, units in excess of the required unit or units are not counted, and units or fractions of units less than the required units are also not counted.

The statement quoted exempts New York state. While the New York Board of Regents has a similar method, yet its standard is theoretically 20 per cent. below that of Michigan, and practically 40 per cent. lower. The latter from the fact that New York accepts the equivalent of a unit on subjects, where Michigan requires 2 units, and the equivalent of one-half a unit where Michigan requires 1 unit, and a fraction of a unit, where Michigan allows no credit whatever.

No New York Regents' Certificate of preliminary qualification thus far presented for endorsement to Michigan has been able to qualify to within at least 40 per cent. of the latter's standard.

The weighing and measuring of the Ontario standard adopted last year in accordance with the Michigan method and as compared with the present Michigan Standard of Preliminary Education would result in the Ontario certificate being found defective to the extent of fully 50 per cent. It will be noted, therefore, that the defect which is stated exists in the Michigan Standard of Preliminary Education has no existence in fact, but on the other hand that Michigan's standard is not only higher than that of any other state in the Union, but in addition its method of administration is upon a higher and more exact plane than any now in existence. Ohio has a similar standard, that of a high school diploma, but its administration is subject to criticism from the standpoint of remarks quoted above, with the result that it is at least 40 per cent. lower than that of Michigan.

The same system is involved in accepting a medical diploma in an application for a state board examination for license. The applicant must not only be a graduate of a college recognized by the board as fulfilling its published itemized standard in every detail, both as regards preliminary and medical education, but he must also furnish the board with a detailed and itemized statement of his medical course. The usual method of the recognition of a college and the acceptance of a diploma as prima facie evidence of qualification is not the method in this state. In addition to the general recognition given to a college its detailed course completed by every graduate who is an applicant for license is investigated. While one graduate of a certain college may be accepted, another graduate of the same college and of the same year may be rejected. By this system, all students

and graduates must stand solely upon actual work and course, and while the general reputation of a college may assist it in obtaining formal recognition in the form of listing, its actual accomplishments in the matter of course and work is necessary in order to continue its standing and to obtain a substantial result.

That this system adopted and in vogue by the Michigan board is ideal, or at least has great merit, and is upon a higher and more practical plane than any system yet developed in this country, is acknowledged from the fact that the Association of American Medical Colleges at its meeting in Chicago April 10th last, adopted the 4,000 hour itemized standard, divided into lectures, laboratory and clinics, similar to the standard now in effect in Michigan; and this same standard was adopted also by the American Federation of Reciprocating, Examining and Licensing Medical Boards at its Indianapolis meeting, April 27th last.

In a letter received from one of the most prominent educators in the United States last April, appears the following:

"At a recent meeting of the American Medical College Association, at which I was present, it was recognized that the Michigan Standard for Medical Education is at the top, for which I am sure your board is to be congratulated."

As a practical result of the Standard of Preliminary Education established by the board, and the method adopted of administering it after some two years, it has demonstrated the fact that fully 50 per cent. of high school diplomas which were issued upon a 15 unit standard, are either defective an average of some 2 units or have been obtained through an unsymmetrical course. Certificates of admission to a great majority of literary colleges whose published requirements look well on paper, have also invariably been found defective in quality. Consequently a great many applicants for admission to medical colleges have been refused endorsement by the board. Some of the rejected applicants possessing these defective diplomas and certificates appeared before the State Board of Preliminary Examiners last September, and all failed to pass or even obtain a condition, therefore demonstrating that the defects above noted were real, not technical.

The keynote of the merits of the Michigan Standard of Preliminary and Medical Education is not solely the standard itself, but the method adopted in enforcing such standard. A diploma, and by the way, the term "diploma" is the most villianously misused word in the English language, is looked upon by the board with suspicion, and is handled with the utmost care, until such time as it is accurately measured and weighed. In other words, it is the man behind the gun, not the gun itself, that commands respect and makes for accurate and lasting results. We have had this well demonstrated recently in the far east.

MEDICAL RECIPROCITY.

After investigating and considering the subject thoroughly in its history and various phases, the State Medical Board took up the subject of medical reciprocity in the fall of 1901, with the view of making effective Section 3, Subdivision 4, of the then existing Chandler Medical Act, which directed the board to receive as a qualification for registration in Michigan the licenses issued by other states in the Union, provided such licenses equaled the qualifications demanded by the act for registration in Michigan, and pro-

vided as well that the state issuing the license to be endorsed should recognize licenses issued by this state having an equal standard. At that time there was practically no medical reciprocity in the United States. There were associations in existence, having as a reason for such existence the object of medical reciprocity, and from the fact that such associations were unofficial and without authority, absolutely no practical results had been accomplished.

Upon suggestion from the board of this state, the executive officers of the Wisconsin, Indiana and Michigan Boards met in Chicago in January, 1902, and formed the American Confederation of Reciprocating, Examining and Licensing Medical Boards, whose membership consists of state medical boards, not members of state medical boards. The states, members of this Confederation, arranged a basis for medical reciprocity, one with another, and actual results in medical reciprocity immediately followed. Since then membership of states in the Confederation has steadily increased, and the following states are members in good standing: Michigan, Wisconsin, Indiana, Nebraska, Kansas, Iowa, Illinois, Maryland, Ohio, Pennsylvania (Eclectic), Kentucky, Georgia. The following states have given notice of intention to join the Confederation as soon as their boards meet to complete the form: District of Columbia, New Mexico, South Carolina, North Dakota, Minnesota, Missouri, Wyoming and Vermont. Maine and New Jersey reciprocate, but are not members of the Confederation.

BASIS ADOPTED BY THE CONFEDERATION FOR MEDICAL RECIPROCITY.

PREREQUISITE CREDENTIALS.

(A) As a prerequisite to reciprocal registration, the applicant therefor shall file in the office of the board of the state of which he is a licentiate, such evidence as will enable the said board to certify that he is of good moral and professional character. In connection therewith, as evidence of moral and professional character after graduation and licensure, each applicant shall present, from his former home, to the state board in which registration is sought, satisfactory evidence that he has been, for at least one year, a member in good standing of the county, state or national medical organization of the school or system of practice to which he belongs, and a certificate of recommendation issued to him by vote, at a regular meeting of the society in which his membership originated, that he is worthy of registration anywhere, and such certificate of recommendation may be treated as part of such application and considered in connection with the other evidence presented.

(B) Each applicant shall be required to furnish in addition to the evidence under (A) an affidavit that in good faith he has abandoned practice in the state from which he came, and that it is his intention to become a permanent resident of the state in which such application is made.

QUALIFICATION I.

(C) A certificate of registration showing that an examination was less than that prescribed by the state in which an average grade of not less than 75 per cent. was awarded, the holder thereof having been at the time of said examination the legal possessor of a diploma from a medical college in good standing in the state where reciprocal registration is sought, may be accepted, in lieu of examination, as evidence of qualification. Pro-

vided, that in case the scope of said examination was less than that prescribed by the state in which registration is sought, the applicant may be required to submit to a supplemental examination by the board thereof in such subjects as have not been covered, and provided, that the applicant had been engaged in the reputable practice of medicine at least one year in the state issuing the certificate on which endorsement is sought.

QUALIFICATION II.

(D) A certificate of registration, or license issued by the proper board of any state, may be accepted as evidence of qualification for reciprocal registration in any other state. Provided, the holder of such certificate had been engaged in the reputable practice of medicine in such state at least one year; and also provided, that the holder thereof was, at the time of such registration, the legal possessor of a diploma issued by a medical college in good standing in the state in which reciprocal registration is sought, and that the date of such diploma was prior to the legal requirement of the examination test in such state.

In Qualification (A) it will be noted that evidence is required which may be furnished easily, and without expense by any physician who is a member in good standing in the organizations of the system of practice to which he professes to belong, and, what is probably of still more importance, as quacks are nearly always migratory characters, it requires a character of evidence which they can never furnish.

Qualification (B) is a necessary safeguard against the abuse of the privileges of reciprocity, especially in the health-resort states, by a class of practitioners who desire to move in and out with the pleasure and health seekers. These requirements put the whole question of reciprocity on such a broad and comprehensive basis as to seem to put them ultimately within the reach of all the states.

Qualification No. I includes the more recent graduates and is designed to cover those applicants for reciprocity who obtained their license through the double qualification of graduation from a reputable medical college and examination before a state medical board. It provides for inequality of state requirements by the only equitable and practical method, viz: a supplemental examination. It matters not under Qualification No. I if the requirements of one state are very much higher than those of the other state. The inequality can be adjusted equitably in every case without inflicting any hardship, and it allows at any time for the raising of standards in states at such times and under such circumstances as are made necessary by local conditions. This qualification eliminates completely "a repetition of the tests of qualification," the one and only reason given for medical reciprocity.

Qualification No. II applies to those reputable practitioners who obtain their state license on the basis of a faculty examination (college diploma) previous to the date of the double examination requirement (college diploma and state certificate) in states. Under this qualification no state is required to accept an applicant whose diploma dates subsequent to the date of the double examination test in such state. In other words, the applicant if he had applied for registration in such state at the time of his graduation would have been accepted. Therefore, the state, under Qualification No. II,

dates back the application only. The applicant, in addition to a standard of qualification recognized as such at the date of issue, at this time also possesses several years of practical experience, which is in itself a legal qualification and asset, and has further been investigated and recommended by the state in which his professional work has been done.

Could any provision for reciprocity be fairer, more equitable, more consistent with constitutional as well as statutory law, broad and yet conservative, insisting upon an exact legal qualification at the date of registration, than Qualification No. II? It includes fully 75 per cent. of those practitioners to whom the benefits of practical reciprocity apply. Reciprocal legislation which provides only for the present and future practitioner and ignores the older and experienced practitioner, for the reason that the latter has not obtained his license through a state board examination, is not only irrelevant and unjust, but is also unconstitutional.

Congress last January passed a medical reciprocity act for the District of Columbia, six lines of which practically includes the principles embodied in Qualifications I and II, namely: The board is not authorized to issue an endorsement of the license of another state, "unless the applicant acquired the right to practice medicine and surgery in such jurisdiction under conditions equivalent to those with which he would have had to comply in order then to have practiced medicine and surgery in the District of Columbia."

I have already called your attention to the principles of law involved in legal advanced standards from a practitioner who at the date of his graduation had fulfilled all and every legal requirement of education and state registration. He could not legally have been required twenty-five years ago to take a four years' course when only a two years' course was given in his legally reputable and at that time high standard medical college. He could hardly have been expected or required to take a course in bacteriology when no such course was feasible; and, again, he could not have been expected to have passed a state board examination twenty years previous to the creation of a board in his state. But, notwithstanding all these impossibilities being quite apparent, state boards of the Illinois, New York, New Jersey and Pennsylvania type contend for medical reciprocity under Qualification No. I only, thereby creating a favored class of licentiates with an increased status, and illegally denying this status to the great majority and the most reputable and experienced class of their licentiates, men who have been tested and found not wanting in professional work and standing. It may be of interest to these boards to learn that any scheme of medical reciprocity which includes only licentiates who obtained their medical licenses on the basis of a state board examination, and which excludes licentiates who obtained their medical licenses on the basis of a college diploma, is unconstitutional and unquestionably would be held so by any one of the several state Supreme Courts or the United States Supreme Court, for the following reasons:

1. State legislatures have authority to make reasonable provision for determining the qualifications of those engaged in the practice of medicine, and in connection therewith to create a tribunal, whether called a court or a board of registration, to administer such provisions.

2. State legislatures have up to a certain date provided as a qualification for registration or license subsequent to the passage of medical acts, a single examination of a certain grade, either by a state board of medical examiners or by a faculty of a medical college recognized by a board of medical registration and examination in lieu of such examination. More recent legislation in many states provides, however, for a double examination for license—one by a recognized faculty, and one by a medical board.

3. Up to the date of a double examination requirement by a state board, the legal status of a college faculty examination fully equals that of a state board examination.

4. It is, therefore, illegal and unconstitutional for a medical board to recognize as a qualification for license a state board examination and refuse recognition as a qualification for license a recognized medical college faculty examination up to the date when the law required a double examination qualification.

5. It is not legally competent for a medical board whose state law provides for medical reciprocity to adopt, even silently and without resolution, the policy of non-medical reciprocity. The law presumes proper action by the board in all its provisions, and boards could be compelled, through mandamus proceedings, to administer rightly a reciprocity provision equal to that of an examination provision.

The legal point in the matter centers on the examination qualification as a requirement for license, and the fact that two kinds of examinations are equally recognized in law up to the date of a double examination requirement. In order to understand the legal point involved, it is necessary to separate the *fact* from the *form,* the latter representing the diploma from the college and the certificate from the board, and the former representing the examination by which the diploma or certificate was obtained. The form is of very minor importance and is useful only for identification purposes, but the fact (the examination) contained in the diploma or certificate is the material substance affected by reciprocity.

The adoption recently by the American Confederation and the Association of American Medical Colleges of a uniform and itemized standard of preliminary and medical education, will without question very greatly promote the future cause of medical reciprocity and will remove a large percentage of the difficulties, real and fancied, which have heretofore been responsible for the "repetition of the tests of qualification" in order to obtain a license in the case of a physician changing his location from one state to another.

Dr. Samuel C. James, President of the Association of American Medical Colleges, in his address at Chicago, April last, states:

"I wish to commend very highly the work of the American Confederation of Reciprocating, Examining and Licensing Medical Boards, which has a membership of fourteen states. Their work is along the lines of uniformity of entrance and graduation requirements, uniformity in state board examinations, uniformity of forms, and modifications necessary in reciprocal qualifications. The work of this association has been the means of accomplishing much for the schools under their jurisdiction. The aims of this body are so highly commendable, and its work is so important and far-reaching, that we would do well to encourage this body and assist them in every way possible. There-

fore, I suggest and urge the appointment of a committee from this Association to attend the next meeting of the Confederation to be held in Indianapolis April 27; this committee to report at our next annual meeting."

THE DISCIPLINE CLAUSE OF THE MEDICAL ACT.

Unfortunately while several of the states legislate against unprofessional conduct and the committing of offences involving moral turpitude by licentiates, only one state—Michigan—in addition specifically legislates against obscene advertising and the employment of solicitors of any form in procuring patients. It is true, of course, that no practical results of these provisions have been so far obtained, owing to the fact that the State Medical Board was enjoined a year and a half ago from hearing the cases charged with offences under this section, but the injunction has recently been dissolved and the law held constitutional, and it will only be a matter of a short time before those licentiates who have disgraced the professional as well as themselves, through want of professional conduct, obscene advertising and other violations, will pay the legal penalty involved by the canceling of their licenses. That an injunction of this nature, issued by one of our circuit courts preventing the enforcement of a perfectly proper and constitutional law should be untried for nearly a year and a half for no other given reason than that the attorneys behind the injunction were busy with other cases, is a parody on the administration of our state laws. While the discipline clause should prevent in the future disreputable acts of licentiates canceling their certificates and preventing their registration in other states, still it will not altogether eliminate objectionable matter from the newspapers, as physicians outside of the state cannot be reached, and practitioners whose licenses are revoked will continue in some instances to advertise and evade the responsibility in law by the employment of other means, impossible to charge directly as a violation of law. The only practical method of preventing objectionable matter in newspapers is the passing of an act by the legislature making it an offence for a newspaper or other publication to print such matter.

PENAL SECTION OF MEDICAL ACT.

By a recent act of the legislature the extreme penalty of a violation of the medical act has been raised from a fine of one hundred dollars to two hundred dollars for each offence, thereby taking the trial of charge of violations from the justice to a circuit court, where questions of law may be properly determined. Nine out of ten persons properly charged with a violation of the medical act were acquitted, owing to the fact that the jury failed to interpret the law properly, and in justice court the juries are not only judges of fact, but the law as well. Michigan at present in respect to the penal section of her medical act is in advance of other states.

STATUS RESULTING FROM THE STATE MEDICAL COLLEGES TO THE QUALITY AND CHARACTER OF THEIR PRODUCT.

MICHIGAN MEDICAL COLLEGES.

Owing to the fact of my active connection with medical legislation and the medical board in this state during the past few years, naturally I spend a large proportion of time possible in this ad-

dress on the subject in which my opportunities for accurate knowledge of it has been greatest. Time only will permit a general reference to the standing and work of our medical colleges, and the continuance of this most important and interesting subject I regretfully pass along to one of my successors in office. I think I can assert without fear of contradiction, however, that the aggregate courses, standing and product of our medical schools in Michigan are fully equal to that of any other state in the Union. The classified results of state examining boards will bear me out in this statement. During the past six years great advances have been made in course and methods of instruction, and still greater things are guaranteed in the future. Owing to the advance in required preliminary education for entrance only properly qualified students can at this time register in Michigan medical colleges. This has considerably reduced the number of students matriculating in Michigan schools, but it will greatly improve the quality of the future graduates. I think I can also prophecy in the near future the requirement of a fifth practical year to the course, which would result and make necessary, according to the best authorities in this country, the adoption of the fifth year by all first-class colleges throughout the United States. The medical board at its recent meeting advanced the standard to eight months in each calendar year, and for the promotion of uniformity adopted the Kober Schedule of Medical Course recently endorsed by the American Confederation and the Association of American Medical Colleges.

STATUS RESULTING FROM STATE MEDICAL SOCIETIES.

You doubtless are very well informed on the subject of the present and past status of the Michigan State Medical Society. You doubtless remember that the year following its re-organization an increase from a membership of 450 to a membership of 1,800 became an accomplished fact, and from 11 affiliated medical societies we have 60 county medical societies meeting weekly, semi-monthly, monthly and quarterly, all working well, with marked and increased interest in all matters pertaining to the profession. The membership in the county society, the most important unit in the county, state and national societies, is being well maintained, and the cordial relations between physicians, where formerly contention and prejudice had full swing, is most noticeable in all the counties where societies have been established under the new order of things. These results obtained through unity and re-organization have been the principal rewards and assets of the society, and if maintained will still continue to bear fruit in the future. As a result of this organization it has been an easy matter to obtain proper and effective legislation in matters of interest affecting the profession, and the nomination and election of one of our most worthy members to the regency of our State University has demonstrated not only the deserved popularity throughout the state of the member-elect, but has also demonstrated the practical purposes and result of state organization. Your officers and members of the Council have been most active during the past year, and district meetings in charge of the several councilors have been organized and held in

seven councilor districts, and three further districts will hold meetings in the near future. The several committees have one and all been more than ordinarily successful, due to their persistent labor and the intelligent handling of their several interests. I will briefly enumerate the result of their successful labors:

The Committee on the Establishment of a Sanitarium for Cases of Incipient Tuberculosis, Dr. H. J. Hartz, Detroit, Chairman.

The labor and difficulties connected with obtaining the committal of the state to the objects of this committee were of very great magnitude, and were overcome by the continued and persistent efforts of the Chairman and the members of this committee, aided by the active support of the state organization represented by the several county societies. It is true that the appropriation made by the legislature was small, but most important is the fact that the state has been committed to the principles involved in the bill, and the work thus favorably begun guarantees its continuance under the most auspicious circumstances in the near future. An official commission under the act will be appointed by the Governor, and this commission will have the authority of the state to continue the matter along conservative yet progressive lines, and to carry out the ideas of the majority of the profession as to the proper and best means of contending with and limiting in the future the reign of the White Plague in this state.

The Committee on Legislation and Public Policy, Dr. Walter H. Sawyer, Hillsdale, Chairman.

Dr. Sawyer is also Chairman of the Legislative Committee of the State Medical Board.

The accomplishments of this committee this year have been most substantial and gratifying. It has to its credit no less than three bills introduced, resulting in three acts without amendment or modification. These acts passed are:

First—An act dividing the State Board Examinations into a Primary and a Final Examination, allowing students in recognized medical colleges to be examined upon and receive credit in those subjects completed in such medical schools at the end of the second year.

Second—An act amending Section 3, Subdivision 6 of the 1903 Medical Act, adding to the discipline clause a provision against the employment of solicitors, runners or cappers by licensed practitioners, or the payment in any form for the procuring of patients.

Third—An act amending the penal section of the medical act, providing for the trial of all cases of violation of the act in circuit courts in place of in justice courts.

All the above acts were given immediate effect.

In addition to the above acts the committee was most active and successful in defeating objectionable acts introduced with the object of modifying the provisions of the legal requirements for medical registration in this state, most important of which was the optometry bill, designed to legalize the treatment of defects of vision by so-called opticians, who carry on the somewhat doubtful business of fitting glasses and curing headaches. This bill will undoubtedly be re-introduced next session, and in the meantime county societies should prepare themselves for effective action at the proper time.

The Committee on Reduction of Time in Which Suit May Be Brought Against a Physician for Malpractice. Dr. F. B. Tibbals, Detroit, Chairman.

The activity and good judgment of the Chairman has been rewarded by the passage of an act reducing the time record from three years to two years, a very substantial modification of the former unjust provision.

Michigan Member of the National Legislative Council of the A. M. A., Dr. Emil Amberg, Detroit.

Dr. Amberg, as usual, has been most active in his services to the cause of legislation, and has accomplished a great deal in the matter of furnishing those in authority with necessary information and advice, in order that the complex subject of medical legislation could be more readily understood and measures for its promotion be practically undertaken.

In closing my remarks on the work and status of the Society during the past year I cannot forego the privilege my office gives me of making a few brief suggestions, having in view its future benefit and success.

FUTURE PLACE OF MEETING.

While the attendance at last year's meeting was most satisfactory, still I believe the general object of the Society would be greatly enhanced if it established a permanent home for itself in Detroit, where advantages can be had not possible in any other place in the state. I may briefly enumerate a few of the benefits probable and possible if the annual meeting of the Society should be permanently established in Detroit.

First—The advantages gained from the fact that Detroit has eligible for membership nearly 1,000 practitioners.

Second—Detroit is not only easily accessible from all points of the state by rail and by water, but she is one of the best reputed convention cities of the United States, and the conditions for members attending the meetings and for the meetings themselves are unsurpassed.

Third—Detroit as a medical center, with its medical schools in the city and in close proximity, could furnish attractions in the form of clinics and demonstrations not possible in any other place in the state.

Fourth—If a city of the size and importance of Detroit were selected as the yearly meeting place of the Society a permanent home building and library owned by the Society would not only be possible but probable in the near future.

Fifth—Detroit being the home of the Society's Journal and the Secretary's office, the conveniences and advantages of meeting there from this connection alone would be very great.

Sixth—Detroit as the largest and most important city in Michigan could furnish attractions and interests which no other city in the state could possibly compete with, thereby guaranteeing always the largest attendance possible at meetings.

BIOGRAPHIES OF THE PIONEER MEDICAL PRACTITIONERS.

The Secretary of the Michigan Historical Society has informed me that it is the desire of the Society to obtain as complete and correct a history as possible of some of the pioneer practitioners of Michigan, and in this connection has suggested that this Society furnish the necessary data. The Law Society of the state has appointed a committee to furnish the Historical Society with the necessary matter in connection with the history of the pioneer legal practitioners of the state, and I

would, therefore, suggest that this Society should also appoint a committee authorized to furnish the Historical Society with the matter desired.

THE PATENT MEDICINE CURSE.

Of all the ills by which the human race is cursed at the present day the greatest of all evils in its magnitude, its baneful effects, and its hold on the people through a purchasable press, is the patent medicine curse. So firm a grasp has it that the average religious or temperance (so-called) papers advocate on the one hand absolute alcoholic prohibition, and with the other hand receive the money for advertising medicine containing ten times the quantity of alcohol than the beer which they unsparingly condemn and curse in their editorial columns. Not only do these so-called religious and temperance papers solicit and receive these alcoholic medicines, but they also receive and solicit "cure-alls" of the most flagrantly obscene nature. For the very reason, the more patent medicines that are used the better it is for the medical profession from the material point of view, suggests the necessity of the profession taking such action whereby this curse can be checked or limited or the public attention called to the necessity of taking measures for its suppression. The question might properly engage our Committee on Legislation and Public Policy, or it might be placed in the hands of a special committee.

Finally, to summarize the Past and Present Status of the Profession in Michigan:

First—Prior to 1883 we had without any legislative restrictions whatever absolute free trade in the practice of medicine in this state.

Second—Subsequent to 1883 and up to 1899 we had legalized free trade in the practice of medicine, owing to the fact that the registration act passed in 1883 was insufficient and simply recorded registrations in place of regulating such registrations. During this period of sixteen years there were some 1,500 medical registrations yearly in the state.

Third—During the period from 1899-1903 the Chandler Medical Act was enforced, resulting in the regulation of the practice of medicine in this state, driving out of the state, or compelling them to cease practicing, some 1,500 persons who had gone through the form of legal registration under the 1883 Act upon the qualifications of bogus medical diplomas or other insufficient qualifications. During this period only the diplomas of United States medical colleges of the first-class were recognized as qualifications for registration, all other applicants for license to practice in the state being compelled to take the board's examination.

Also during this period the re-organization of the State Medical Society took place and was a most important factor in the advance of professional standing and increasing the qualifications for medical registration. The yearly registrations during this period averaged five hundred.

Fourth—During the period from 1903-1905 to date, the Nottingham Amendments to the Medical Act of 1899 have been in force, resulting in raising and regulating the requirements of Preliminary and Medical Education for Registration in the state to such a standard that at the present time Michigan's requirements for the legal practice of medicine is on as high or even higher plane than that of any other state in the Union.

In the important subject of medical reciprocity Michigan is held by the profession throughout the Union as not only an originator, but also as a leader in the matter of effective action and ability to overcome in a practical manner problems heretofore held impossible of solution.

Michigan medical colleges have kept closely in touch with higher requirements and their standings have advanced to the degree contemplated by the legislature.

The State Medical Society has, during this period, grown satisfactorily in numbers, organization and influence, and has demonstrated that in public questions affecting the interests of the profession it is a power to be reckoned with in the proper and righteous solution of such questions.

The yearly registrations under the 1903 Medical Act average a little less than three hundred.

In comparison with other states the three forces involved in and responsible for medical status, namely: Medical Legislation, Standard of Colleges and an Organized Profession represented by the State Medical Society, I think you will agree with the conclusion that taking into account the status of the profession in 1883 and again in 1899, the present, or 1905, status of the profession in Michigan, is not only eminently satisfactory and gratifying, but most surprising in its advance in so brief a period.

SURGERY AND HUMAN WELFARE.*

FRANK B. WALKER,
Detroit.

As the spirit of patriotism and of loyalty warms within us on the return of our national memorial days and words of gratitude and honor come to our lips for those who wrought and sacrificed for us, so on this occasion our hearts as well as our minds are stirred by the hallowed memories that cluster about the humble origin, the difficult growth and glorious achievements of our chosen profession. It is in deference to this sentiment and because of the important role that surgery has assumed in the modern practice of medicine and surgery, and its bearing upon human welfare that I have chosen this subject.

The remarkable advances made in medicine and surgery during the past few decades are now matters of common parlance. They have been marvelous in the rapidity with which they have come about and in the extent to which they have reached. When mention is made of them in these days, medicine and surgery are generally spoken of as one undivided whole. Such they really are and essentially will remain so, but the fact that there are two terms instead of one designating the healing art and the historic fact that they were divorced from each other for long periods of time, indicate a natural comparison if not a contrast. We have in mind at this time a reasonable comparison, one that will express the real truth with regard to the one without disparaging the other.

*Oration on surgery. Read at the annual meeting of the Michigan State Medical Society at Petoskey, June 29, 1905.

It is pertinent in this connection to determine in an approximate degree, if possible, how much the human race is indebted to surgery for its past and present welfare. What human welfare is or has been would, seem to be a matter of opinion. To judge by the applause and criticism of mankind and by the manner in which life, health, financial gain, social position, political ambition, distinction in art or literature or science, and sensual gratification are bartered for each other, one would infer that the standard of human welfare varied with different individuals, and that the particular forces at work to produce it, ranked in importance according to the point of view. Without pursuing this phase of the question, it will simply be taken for granted that life and good health supercede all other features of our earthly existence. They did precede in the life of the race all the artificialities of civilization that seem now so essential to happiness, and have been, are now and always will be the conditions upon which will depend the perfect enjoyment of all other things.

Neither history nor tradition informs us in regard to the exact time and manner of the origin of medicine and surgery. Fancy, however, carries us back to a far distant prehistoric period when our earliest ancestors, guided by instinct and by observation of the lower animals, sought repose and relief by crude and imperfect means and by the employment of leaves, roots, minerals and natural waters to assuage their pains if not to attain perpetual youth. Medicine had a most lowly origin, and from all accounts surgery played the meanest part of it. I shall take time merely to allude to its status through the centuries, and yet this department of history is most interesting and fascinating since it portrays more vividly than wars or boundary lines the actual welfare or lack of it, that those generations enjoyed.

The earliest authentic reference to anything of a surgical character relates to the command of Joseph to his servant and physicians to embalm him, implying some crude knowledge of anatomy. Among the Chinese the invention of medicine was ascribed to one of their emperors, who lived about 2687 B. C. Account is given of their using fomentations, plasters, lotions, baths, cups and acupuncture and the red hot button, but they had no knowledge of anatomy and their surgery was barbarous. Bloody operations were not attempted; the reduction of hernia was unknown; the treatment of cataract was beyond them, and even venesection was not practiced. Among the Greeks before the Trojan war surgery was involved in myth and tradition. Medicine at first was guided by instinct and practiced by shepherds and soldiers, then by priests. After the Trojan war, 1184 B. C., practice was confined to the temples and degenerated later to superstition, mysticism and the rankest jugglery. The custom of visiting patients in their own homes was attributed to Pythagoras and his followers. In the ancient Gymnasia of Greece were three orders of physicians, one of whom, the Iatroliptes, put up prescriptions, anointed, bled, gave massage, dressed wounds and ulcers, reduced dislocations and treated abscesses. Some of these physicians were reputed to have shown wonderful skill. It is recalled that Plato, antedating Osler by many centuries, reprimanded Heroditus for succeeding too well in prolonging the lives of the aged. Under the name of Hippocrates, who was born 400 B. C., some au-

thentic and many spurious writings have come down. Among them are The Laboratory of the Surgeon, in which he treats of articulations, luxations, fractures, instruments, dressings, bandaging and operating. He described wounds of the head, of the heart, the glands, the nature of bones, and yet, owing to the respect of the Greeks for the bodies of the dead and the consequent prevention of dissection, anatomical knowledge was most meagre at this time. It is not strange therefore that arteries and veins were confounded and nerves, tendons, ligaments and membranes were represented as analagous tissues. Physiology was speculatory without an anatomical basis. In fact his ideas were rife with speculation. His books are full of the four elements—earth, water, air and fire; four elementary qualities—heat, cold, dryness and moisture; and the four cardinal humors—blood, bile, atrabile and phlegm. With the establishment of the Alexandrian library and under the patronage of the Ptolemies, the study of anatomy was greatly encouraged. As soon, however, as Rome dominated Egypt, dissection fell off. The Romans would witness any amount of bloodshed in the arena and all sorts of inhuman practices upon living human beings, but considered contact with a corpse to be profanation. It has been stated that during Galen's time (131-201), there was not in Rome a single skeleton. Indeed Galen barely mentions five or six men who devoted themselves to dissection during the space of four hundred years down to his time. He nevertheless wrote fifteen books on Anatomy, classifying muscles as flexors and extensors, and is said to have been the first vivisector. He noticed that blood spurted from a wounded artery and nearly discovered the circulation. He represented the highest authority in medicine during that period and yet held the most curious views on many points. After his death dissection was neglected. Medicine as a whole retrograded for several hundred years. Only here and there were physicians of any eminence. The rest were ignorant, indolent and apathetic. Alexander of Tralles (525-605) advised venesection in the foot rather than in the arm, but like the age in which he lived, he was bound up in prejudice and superstition. Paulus, a celebrated Greek physician, who died 690 A. D., advised paracentesis of the thorax and abdomen, extracted calculi from the bladder, treated aneurism, excised hypertrophied mammae in men and performed bronchotomy. Among the few bright minds of these centuries was Albucasis, who died 1122 A. D. He compiled a practice of medicine, devoting a small portion to surgery. He does not mention dissection, but used the cautery in spontaneous luxations and commencing curvature of the spine. Of fractures and dislocations he remarked, "This part of surgery has been abandoned to men of vulgar and uncultivated minds, for which reason it has fallen into undeserved contempt." The Arabians were weak in surgery since their religious prejudices prohibited dissection. Early in the thirteenth century lived Roger, of Parma, called the earliest pioneer in modern surgery. He contended for poultices and moist dressings in the treatment of wounds, abscesses, and ulcers, against the school at Bologna, where Hugo Di Lucca insisted upon the dry treatment. Roger was the first to use the term seton. The school at Salernum, in the twelfth and thirteenth centuries, was a bright spot. Salernian practitioners used the trepan

ligatures for wounds of the carotid arteries and jugular veins, instructed how to treat wounded intestines, extracted diseased teeth, used splints for fractures, and understood the operation of lithotomy. From 1250 the barbers did the scarifying and bleeding. Others, even women, learned to apply leeches and cauteries, competed with the barbers and rivaled the clergy. Clerical surgeons regarded operations beneath their dignity. Most of the knowledge of anatomy in this period was derived from a treatise of Copho on the anatomy of the hog. Guy de Chauliac, born about 1300, the most famous physician in his time, published The Inventory—a work on surgery—and divided abscesses into hot and cold, including among the latter, oedema, tympanites, dropsy, and scirrhus. He opened the abdomen for dropsy, attempted radical cure of hernia and operated for cataract. Sylvius, born 1478, was the first to arrange all the muscles of the human body and to name those not already designated. He first studied blood vessels, using colored injections and discovered the valves of the large veins. Fabricius Hildanus recommended amputation in case of gangrene. The study of gross pathology and pathological anatomy was begun by Benivieni, a Florentine, who died in 1502. Hippocrates and Galen had advised bleeding from the arm on the affected side in pleurisy and pneumonia. That practice was abandoned with the neglect of Greek traditions and the Arabs substituted pricking a vein in the foot to let it bleed drop by drop. This continued until the sixteenth century, when the Greek method was revived. Previous to the fifteenth century surgery was regarded below medicine. The latter was in the hands of the priests, while the former was abandoned to a class of ignorant barbers, bathers and bonesetters—all social outcasts. Most of the operators were traveling surgeons, who stopped in a place as long as cases lasted or until reverses compelled them to leave. They usually did one or two operations. Some operated for hernia, others for stone, still others for cataract, etc., and the secret method became a family heritage. As the prejudice against dissection lessened great students of anatomy appeared, among them Benivieni, de Carpi, Vesalius, Fallopius and Fabricius, who were also in their time great surgeons. Gradually the number of surgeons increased as the clergy became willing to descend to this kind of work. The gulf between the physicians and surgeons narrowed until first in 1515, a reconciliation took place between the Brotherhood of St. Come—a college of surgeons in France—and the university. This was the new birth of surgery. The story of Paré has often been told, but is worth repeating. He stopped the practice of pouring boiling oil into wounds and amputations, and the use of the redhot iron to stop hemorrhage and recommended the ligature for amputations, thus freeing that operation from the great torture which had hitherto accompanied it. Caesarean section, which had been known to the ancient Greeks and Romans and abandoned during the middle ages, was restored in the sixteenth century. Leonard Botal, a Piedmontese, born in 1530, was the first to recommend frequent and general bloodletting. He declared that an infirm old man should be bled from two to six times a year, and that healthy individuals should have their veins opened every six months. By the middle of the sixteenth century the priesthood became separated from medicine and

surgery began to approach it. The seventeenth century witnessed the discovery of the circulation, of peruvian bark, the invention of the thermometer, the Italian method of rhinoplasty, the invention of the tourniquet by Morel at the siege of Besancon in 1674, the first transfusion of blood in man by Jean Baptiste Denis, and the invention of the bistoury by Bienaise. In this century also the Collots, the famous family of lithotomists, lived. Lambert practiced injection in hydrocele; Andry of Lyons originated the term orthopedics, and Georges Mareschal was said to have performed eight lithotomies in half an hour. During this century the better physicians received support from the state and the reputation of the profession improved. The seventeenth century has been called one of aggrandisement of physicians, but social emancipation did not come until the eighteenth. According to one classification the regular profession included physicians, surgeons, barbers, regimental surgeons, lithotomists, bathkeepers, midwives, nurses, apothocaries, druggists, confectioners and grocers. The eighteenth century brought the screw tourniquet, invented by Petit. Sabatier recommended resection of the head of the humerus. Desault protested against the promiscuous use of the trephine and championed healing by first intention. Bilguer performed the first resection of the wrist in 1762. Von Siebold revived symphysiotomy. White, of Manchester, originated the method of reducing dislocation of the humerus with the foot in the axilla and operations for false joint by removing involved surfaces of the bone. The elbow joint was first excised by Wainman in 1758, and the knee joint by Filkin. These joint excisions were however soon forgotten. During this century there lived also many other famous anatomists and surgeons, among whom were Chopart, Tenon, Scarpa, Gimbernat, Winslow and Portal. Surgery had begun to advance in earnest. As one writer has put it, the sixteenth century opened the way for checking hemorrhages; the seventeenth simplified methods and improved the treatment of wounds; the eighteenth saw the real beginning of the study of pathological anatomy which made surgery more exact and put it on a footing with other branches of science. The nineteenth continued medical progress along these lines and further by the discovery of anesthesia and the application of the germ theory of disease contributed more than all the preceding centuries combined. In consequence of these advances the practice of surgery has been revolutionized, its possibilities infinitely extended and its blessings correspondingly multiplied. Procedures formerly unjustifiable have now become not only feasible but answerable to duty. In addition to those already mentioned there have been other evidences of surgical activity and growth in the last century the character of which will be recalled by merely mentioning a few in the grand galaxy of names. There was Jeffrey, the inventor of the chain saw; Heine of osteotomy; Esmarch, the inventor of Esmarch's bandage; Sims, Emmet, von Langenbeck, Billroth, Czerny, Gussenbauer, Mikulicz, Pirogoff, McDowell, Larrey, who introduced into surgery plaster of Paris, Dupuytren, Lis-Franc, Velpeau, Pravaz, Malgaigne, Nelaton, Sir Astley Cooper, Syme, Liston, Lister, Sir Henry Thompson, Lawson Tait, Sir Spencer Wells, John Collins Warren, Mott, Hodgen, Senn, Murphy and a host of others, each of whom have

materially contributed to the world's progress.

From this brief resumé of the development of surgery and by reading between the lines can be made out in an approximate measure the quantity and quality of assistance that surgery has given during the centuries in solving the problem of life. To be sure in the early history of the race surgery offered little even in comparison to medicine, but it may be fair to state that compared with the present less was needed. It may not be assumed nor do I think it true that surgery kept pace uniformly with advances all along the line. When we remember that for long periods surgery was not only neglected but even stunted by the prohibition of dissection we can not wonder that it did not grow. Vienna did not possess a skeleton until 1658. Strassburg obtained one of a male in 1671, and several years later one of a female. Secret dissections were performed at Harvard in 1771 and were unlawful for 60 years more. As heavily burdened with its own troubles as it is, the church has much to answer for in the deprivation of benefits from surgery for which it was responsible. Furthermore when we consider the environment in which surgery was placed for so long during the middle ages we could not expect it to have developed. Surgery is one of the products of the division of labor. It has required an atmosphere of sciences developing in many channels and the possibility of cultivating special skill. Time was when there was no opportunity for the development of special skill in any line of work. Each individual unavoidably scattered his forces to supply his own needs. Division of labor has however made possible close application and in consequence the refinement of skill, and now as a result almost particularized the function of the individual. That this is true has been repeatedly demonstrated by the successes and failures of men in their chosen occupations. Happy is the man who has the good fortune to choose the vocation for which heredity and environment have fitted him. Failure does not mean of no use but a misfit.

It is unnecessary to recount in detail the many points of preferment which surgery has now obtained over medicine. The comparison may be made theoretically from standard medical works and practically from clinical reports. In a general way it may be stated that with certain exceptions, medicine has to do with physiological principles and functional alterations, usually of a temporary character, while surgery treats chiefly of pathologic conditions and more or less permanent organic changes. A close comparison of text-books of fifty or even twenty years ago and now would exhibit marked changes in their subject matter. These changes would relate not only to topics discussed but also to their tentative style of treatment. From the impetus imparted by expanding collateral sciences, surgery has not only perfected the treatment of purely surgical diseases, but also assumed to itself the care of cases previously considered purely medical. Cases showing diseased conditions of visceral organs aptly represent such progress. In strong contrast to former periods the present time witnesses prompt and general acceptance and adoption of real advances. Instead of a bigoted adherence to false theories and imperfect methods as the followers of Hippocrates and Galen exhibited, there is now a spirit of willingness to accept the truth at any hand, and

a persistent endeavor to bring surgical technique to absolute perfection. In consequence the entire surgical world is one large laboratory where all the workers are diligently striving together to learn the cause and an immense clinical amphitheatre wherein a vast army of surgeons are each and everyone applying the latest and best modes of treatment.

Recently, while looking over the last annual reports of a score of general hospitals located in all sections of this country, I was struck by the great preponderance of surgical over medical cases, which were cared for in these places. The contrast in favor of surgery was marked, both in the number treated and in the percentage of recoveries. As has been referred to already the kinds of cases exhibited a wider application of surgery than medicine and the redemption of many medical failures through the adoption of modern surgical methods of diagnosis and treatment.

Looking at the fruits of surgery at short range we are apt to underestimate the brilliancy and the magnitude of its results. We are accustomed to look for its everyday application and cease to marvel and give credit. Put down in our midst the surgery of the early Egyptians or of Galen, or of the middle ages, or of Paré, or of the eighteenth century, or of fifty or even twenty-five years ago, with the limited number of individuals able to apply it, and then only could we be made to realize the incalculable benefits of surgical progress. Even an approximation that would seem satisfactory is impossible. We can only accept gratefully the fact that not only the happiness but the very lives of hundreds of thousands of human beings are annually conserved through the agency of that formerly despised art—surgery.

IS GYNECOLOGY TO REMAIN A SEPARATE SPECIALTY?*

RICHARD R. SMITH,
Grand Rapids.

With the advent of modern surgery, gynæcology took on new life, in fact, it can hardly be said to have been a distinct specialty before this time. Intimately linked, until then, with obstetrics it had had, to be sure, an existence, but hardly more. Within the past thirty years, however, owing mostly to surgical methods of treatment, a vast amount of work has been done in this field. The complete revision of ideas in regard to physiology and pathology—and a surgical technic have employed the time and energies of certain medical men and gynæcology has been regarded as a specialty. Every useful fact obtained, every operation, every new idea, has had to withstand long and bitter contention, scathing criticism, or the more disastrous effect of too ready adoption and widespread application with its resultant reaction. But a great deal has run the gauntlet and has lived, so that to-day there is no exacter nor more useful

*Oration on Obstetrics and Gynecology. Read at the annual meeting of the Michigan State Medical Society at Petoskey, June 30, 1905.

science to be found within the pale of modern medicine. Starting with the haziest kind of ideas in regard to diseases of the pelvis, much of it based on symptoms, there has been slowly developed a science founded upon pathology. From talk in regard to dysmenorrhea, menorrhagia or leucorrhea, we have come to discussions of actual conditions—of endometritis, uterine displacements, fibroids, carcinoma, or pelvic inflammations. Fifteen years ago gynæcological surgery was limited mostly to plastic operations and currettements—the gynæcologist but suldom opened the abdomen.

To-day plastic operations are considered but an insignificant part of the work of the operating gynæcologist, it is largely abdominal.

Within the past few years there have been seen some rather startling tendencies. In the first place there has been shown a disposition on the part of the general surgeon to invade this field. He is removing the uterus, he is correcting displacements, he is confidently removing the appendages and with it all, he is perhaps a little inclined to belittle pelvic work. We not infrequently hear him remark that gynæcology consists of but a few operations anyway, that any good surgeon ought to do, and that it is, or should be, merging into general surgery. And the gynæcologist remonstrates in vain, exclaiming that the ability to remove a uterus, or repair a cervix does not make a gynæcologist, but that long years of patient study and training in the physiology and pathology as well as the surgery, are necessary to deal with the diseases peculiar to women.

On the other hand, and it would almost seem in retaliation, the gynæcologist has been invading the upper abdomen. In doing so he is meeting with a storm of criticism, not only from his brother, the general surgeon, but also from many gynæcologists, who, proud of what has been accomplished in this field, perhaps, too, of the part they have had in it, jealously guard this domain. They cry that there are many questions of the pelvis still unsolved; that the work in this field alone is more than enough to employ the time and efforts of one set of men; that in extending the work to other regions of the abdomen you are but detracting from the fineness of your work in the pelvis proper.

All of these arguments have a certain amount of force—the work of the general surgeon in the pelvis has been, and may still be said to be far from good. He fails, often, to grasp underlying principles in his plastic work and his intrapelvic work is apt to be old fashioned. He is frequently still tying off appendages en masse, sometimes even using silk, and but few of them ever do anything but a ventrofixation to correct a displaced uterus. He is working through miniature incisions and seldom examines the appendix and gall-bladder. The resection of partially diseased ovaries, the careful covering in of denuded surfaces with peritoneum—leaving the pelvis in a smooth, surgically neat condition—the various operations to correct displacements, leaving the uterus in a natural position and retaining its normal mobility, are operations you seldom see done by the general surgeon. The gynæcologist to-day performs total oblation of the ovaries only under strong indications and then with regret, but alas, this operation, even to-day, is done only too frequently by the occasional invader of this field or by him

whose interests have been mostly in other surgical work.

Gynæcology is by no means a perfected science—there are many, many problems still unsolved, and most important ones, too. The treatment of carcinoma of the uterus, although the later, more radical operations are improving results, is still far from satisfactory. The correction of displacements is still much discussed. Some are advocating numerous round ligament operations in and outside of the abdomen. The ligament is pulled through and stitched outside the internal ring, or through separate openings, or intra-abdominally it is lapped on itself in various ways, or stitched in front or behind the uterus. Shortening of the utero-sacral ligaments is practiced largely in the east and with more or less satisfactory results. Ventrofixation and suspension, so long practiced, are to-day tabooed by the majority of gynæcologists —the imperfect functional results and especially the occasional difficulty in following labors, having brought them into disrepute. The variety of other operations suggested, however, are almost admissions of their imperfection. The correction of uterine displacements, then, can hardly be said to be solved. We might cite other equally important shortcomings in operative work.

Many interesting and important questions in physiology and pathology need further solution, the relationship and importance of the various uterine supports, the cause of deciduoma molignum, the origin of fibroids, of carcinoma and of many other neoplasms are still unknown.

But in spite of the fact that gynæcology is still imperfectly developed, the gynæcologist is turning his attention to other fields, is investigating the pathology and operating other abdominal organs. Why is he doing so? Mainly, I believe, because of the now more fully understood association of pathological conditions in the abdomen with those of the pelvic organs. The importance that appendicitis assumed attracted his attention and led him to examine this organ which lay so near his field. To investigate was to lead him to the solution of many of the symptoms of which his patients had complained and the removal of the appendix obtained for him better results and more complete relief. Much the same can be said of the kidney and the gall-bladder. Having improved his technic and shortened his time of operation, he has had time to investigate and oftentimes under proper indications to operate these organs. The real reason then, for the gynæcologist doing general abdominal work, is not that he has lost sight of the problems in the pelvis itself, not that he thinks that he has reached perfection in technic, or that his pelvic results are all that can be desired, nor again that because he is a skillful operator he can safely venture into another man's field; but because he cannot have a broad, comprehensive grasp of his subject unless he is familiar with and able to operate upon all other abdominal organs. Simply because all pelvic problems are not solved, shall the gynæcologist wait year after year while other equally important things bearing on his subject are awaiting him in the adjacent abdomen?

What shall it avail him if he diagnose and operate a displaced uterus and fail to recognize prolapsed abdominal organs—the stomach, intestines and kidney? He diagnoses and operates a right sided tubal

infection, finds after his patient has left the hospital that most of her trouble has been caused by a diseased appendix, gall-bladder or kidney. Is he doing his patients justice not to examine these organs and operate them if the same is indicated. Another, although perhaps less important reason for the gynæcologist performing general abdominal work is the surgical training which he has at his command and which makes him eminently fit to do other abdominal surgery. His carefully studied and perfected surgical technic is practically the same and most of the manipulation is similar.

The gynæcologist has still much to learn of general abdominal surgery. His gall-stone operations certainly lack the completeness of the surgeon who has paid special attention to this line of work. He has not as yet devoted much time and attention to diseases of the stomach and its surgery. The general surgeon, on the other hand, is constantly improving his technic in the pelvis and is gaining a broader and better grasp of the subject.

It takes, it seems to me, but little power of prophecy to see the outcome of all this. Argue as we may, the gynæcologist is going to do not only the work in the pelvis, but is going to do all other abdominal work. The abdominal surgeon, on the other hand, will operate more and more in the pelvis, but if he is to compete, he will be obliged to devote more attention to this difficult field. The two will, I believe, in a way converge—and we will have a new specialty. It perhaps can be said that that day has already arrived—a specialty of pelvic and abdominal surgery. The men who are to do this work must have special fitting not only in gynæcological physiology and pathology and surgery, but must be equally familiar with the physiology, pathology, operative technic and all that pertains to the stomach, kidney, gall-bladder, intestines, appendix—in fact, everything intra-abdominal. It would seem to me to be a most natural division. It will be a specialty founded upon a close and positive relationship of diseases, an elaborate special technic and a peculiar fitness and training for this responsible field. It can readily remain apart from surgery of the head and thorax, from railroad or accident surgery, from fractures or orthopedic surgery or from genito-urinary surgery. It is rarely feasible for one to practice obstetrics and surgery and to do justice to both. For practical reasons the affiliation between obstetrics and gynæcology must, it seems to me, grow weaker, in spite of the many problems which they have in common. Newer, more practical and, I believe, broader, lines will be drawn.

Commerce of Surgery.—Fernand Hennrotin, Chicago (*Journal, A. M. A.*, July 15, 1905), calls attention to the fact that physicians are said to be no less deeply stained with the supposedly unfortunate taint of commercialism than their brethren in other lines of work. He says that primitive man displayed his assertion in grasping whatever suited his fancy, and that the inheritant desire of possession and enjoyment underlies our very nature—a legacy of man's continual struggle with the forces of nature. Physicians are no more exempt from this desire of possession than other classes of society, and to this attribute, Hennrotin states, is due much of their activity and success at the present time. He states that physicians should make their patients understand that they expect a definite return for their services, and advises a prompt collection of accounts. He touches briefly on the matter of commissions given by surgeons to general practitioners, and concludes his paper by stating that the matter of commercialism among physicians will settle itself.

PLACENTA PREVIA.*

G. W. NIHART,
Petoskey.

Sudden and accidental hemorrhage during gestation has been a theme for discussion, among medical men, since the earliest dawn of medical history, and well might the subject receive the candid and serious attention of every physician today. A sudden hemorrhage occurring in a pregnant woman after the fifth month of gestation, should make a physician apprehensive of an abnormal placental attachment. The causes producing the abnormal condition, sources of blood, and the means of nature for its arrest; also, the proper treatment, all, have been, and are now, the subject of countless controversies.

What constitutes placenta previa? I always liked Rigby's definition given over 100 years ago, viz: That the placenta is previa, when fixed in that part of the womb which always dilates as labor advances. When we remember that the lower uterine segment represents a funnel, the narrow internal orifice, corresponding with the internal os; that when the child passes this part, the lower segment is stretched and dilated, until it gradually assumes the shape of a cylinder, it is not strange that when the placenta or any part of it, is attached to this segment of the uterus, that hemorrhage is bound to occur during labor.

As to the frequency of placenta previa authorities differ. Rigby gives 42 out of 108 cases of hemorrhage, which is far greater than we experience at this time. Johnson and Sinclair gives 1 out of 573 deliveries, Hecker, 42 in 17,000. Speigleberg regards the proportion as one in 1,000, etc. As to the histology of this condition we have not improved materially, since the time of Paré. He thought that the placenta, because of its premature detachment gradually encroached on the mouth of the uterus as pregnancy advanced, and for over 100 years this was entertained; others that it was on account of the position assumed by the female just after coition; others that it was on account of the greater specific gravity of the ovum. One thing I have noticed in my experience in this regard, and that is, the greater majority of these cases are among the poorer, hard working classes—getting up after confinement before subinvolution has taken place, and becoming pregnant during this condition, and hence think this a potent cause.

There are two varieties of this troublesome difficulty, namely, central and lateral. Central, when the placental disk corresponds with the internal os; lateral, when the disk is attached to the margin of the os. I wish to say, in this connection, that fortunately, the former condition is very rare. I have never seen a case where the placental attachment was strictly central, even if the os was found completely covered; I found that in detaching it on the edge or side that there was a lateral condition.

As to the diagnosis, hemorrhage is the most characteristic. This may occur prior to or at the commencement of labor. My experience is, that is it very liable to

*Read before the Section on Obstetrics and Gynecology at the annual meeting of the Michigan State Medical Society at Petoskey, June 28, 1905.

occur between the fifth month and the commencement of labor. The cause of this anomally is explained, when we remember that during the first stage of labor the lower zone of the uterus is dilating, and in this way detaches portions of the placenta, and as a consequence causes bleeding. As to the muscles of the uterus brought into play during the above process, I will not worry your patience in describing it, but will pass on to the most essential part of my subject, to the accoucheur, namely, the treatment. This should be carried out with the view of the least maternal, and the least fetal mortality; hence some methods in vogue are attended with very great mortality (fetal), and should not be generally adopted. When called to attend a case of hemorrhage during the pregnant state I first endeavor to determine whether it is caused by placenta previa or from some other cause, such as a fall, heavy lifting, etc. If the flow be slight, and the fetus not viable, I desist from active interference, remembering that even in the central implantation, it is not always that the life of the mother, or the nutrition of the fetus is interfered with, hence rest in the horizontal position, cold water vaginal injections, and sedatives are indicated to tide the patient over; in fact, the case should be handled much as the usual case of abortion. However, if there is serious hemorrhage, and the fetus is viable, premature labor is indicated. When labor occurs spontaneously, whether at term or previously to this time, I proceed to deliver under anesthesia, by dilating the os if necessary, by the use of my fingers, detach the placenta on one side or the other, gently and persistently insinuate the hand into the utrus, rupturing the membranes, then grasping a foot, and pulling it down into the os, to act as a plug, and wait for nature to assist in the delivery, or, in fact, to carry out the Braxton Hick's method. I wish to state that I do not use the tampon, unless I desire to percipitate labor, where through its mechanical effect it works nicely, providing it can be kept in place. As a haemostatic it amounts to but little, as it soaks through in a short time, and the effect, at most, is only temporary. Paradoxical as it may seem, there are a few cases of bloodless placenta previa on record. In the *Courier of Medicine,* July, 1903, W. G. Moore describes a case where after the rupture of the membranes, half of the placenta and portion of the cord, were seen outside the vulva, the head being expelled with the next pain. The remaining portion of placenta was found adherent to the cervix. There was no hemorrhage.

Hammer reports 107 cases of p. p. as follows:

Placenta P. Centralis..... 19.
Placenta P. Lateralis ..... 70.
Placenta P. Marginalis..... 18.
Mortality of mothers....7.47 per cent.
Mortality of children....54.2 per cent.

The treatment used might be of interest.

1. In P. P. centralis Braxton Hick's version 14 times. One mother died; 11 children died.

2. In P. P. lateralis, combined version 40 times. Thirty-four mothers and 13 children saved. Tampon, 8 cases. Seven mothers and 2 children saved.

In breech presentations, slow extraction, 8 cases. All the mothers saved with one child.

Artificial rupture of membranes sufficient in 11 cases. All the mothers and one child saved. Forceps 2 cases; good

results. Perforation, 1 case. Metreurysis, 2 cases; good results.

3. In P. P. marginalis, combined version once; internal version once; rupture of membranes 13 cases. One child died of nephritis.

Only 36 children were at full term and in these cases, the marginal form of p. p. was present. The maternal mortality, on first thought seems high, but one each was due to eclampsia, lysol-poisoning, air embolism and sepsis. The remaining (3 cases) were caused by post partum hemorrhage, which, by the way is a great danger in these cases, which should be treated by firmly packing the whole of the inter-vaginal track. The fetal mortality in combined version is 31 per cent., though most of the infants were premature. I will not tire your patience, gentlemen, further by the detailing of cases that have come under my care, further than to say that out of six cases I succeeded in saving all the mothers and three of the children, the other three being premature. I have, gentlemen, endeavored to give a short, and I trust, somewhat practical paper on this, one of the most troublesome and dangerous complications of the lying-in-room.

SOME DIFFICULTIES IN THE DIAGNOSIS OF SYPHILIS.*

JAMES F. BREAKEY,
Ann Arbor.

Before the law every one is supposed to be innocent until proved guilty. In the practice of medicine, were one to make a rule as to the probabilities of the presence of syphilis, it would be better to take the stand that all patients are probably syphilitic until the contrary is established. Such a statement will undoubtedly be called rank pessimism by many, but it is being pessimistic upon the safe side at least; not that every one is probably immoral or syphilitic, but no one is absolutely exempt from the possibilities of syphilis either acquired or inherited, and that fact should constantly be borne in mind.

General practitioners, particularly in smaller towns, constantly fall into error through failing to remember the prevalence and widespread distribution of the disease, with its insidious and varied symptoms and manifestations. Many decline to stigmatize their patients with such a diagnosis even in the presence of the most patent signs; while others, recognizing the symptoms, fail to attach to them their true significance. This failure to properly diagnose the condition is not at any one stage of the disease. The primary chancre, the secondary eruption and the tertiary necrosis of nasal and other bones or gummata are daily seen by physicians who fail to attach to them their true meaning and the underlying cause. Possibly, in fact quite probably, many mistakes are made and cases overlooked because physicians, forgetting the unusual types and courses of the disease, are expecting classic symptoms and history; to say nothing of the many cases in which

*Read before Section on General Medicine at the annual meeting of the Michigan State Medical Society at Petoskey, June 29, 1905.

we find well marked dermatoses or constitutional diseases co-incident with syphilis.

While syphilis may be complicated by the presence of any other disease, either local or constitutional, probably the most frequent and most serious is tuberculosis. The concurrence of these two not unusual diseases always renders a prognosis most grave, and only by the early recognition of both diseases and vigorous treatment for each may one hope for success in their handling. Pulmonary tuberculosis and syphilis usually run a most rapidly fatal course as does syphilis and tubercular peritonitis. Localized tubercular lesions however, may be present in the syphilitic and by early recognition and appropriate treatment improve. Tubercular bone lesions and tubercular joints not infrequently occur in syphilitics, and, providing the syphilitic infection is not of the rapidly malignant type, the tubercular lesions yield to proper treatment with as good results, as in non-syphilitics. In all cases of doubt, active specific medication should be pushed before instituting other measures for relief.

One would think that a primary lesion could rarely be mistaken for anything else, but unfortunately such is frequently the case. There are various causes for such mistakes. Upon the appearance of a genital sore, the patient usually attributes it to the last exposure, which many times was but a few days before. In such cases it is necessary to get a history of the patient's habits for the three preceding months, during which time one will most likely find abundant opportunity for sources of infection. Mixed infections and extragenital and innocent infections probably offer the greatest stumbling blocks to proper diagnosis. There are two kinds of mixed infections, or rather, ulcers of a mixed type. First: that in which the patient receives both a chancroidal and syphilitic infection at the same time, or at a succeeding exposure has a syphilitic infection implanted upon a chancroidal one. Second: that in which a primary syphilitic ulcer, through uncleanliness, improper treatment or otherwise, becomes the seat of a second infection of another type. These two mixed lesions vary in their clinical development. In the first class early manifestations of local infection are found, without any of the classic evidences of syphilis, all of which may be looked for in their proper time. In the latter case we have a fairly typical lesion appearing after the ordinary interval of time after exposure, but taking on rather rapidly and quite unexpectedly the appearances of an acute infection. These local symptoms are quite likely to persist until the appearance of the secondary eruption. Ulcers of a mixed type are very frequent; so often do they occur that the wonder is they are not given greater prominence in modern text books.

A patient contracts a venereal infection which develops within a few days after exposure. He consults a physician who assures him that a syphilitic lesion would not appear within so short a time. Not once in a hundred times is he told that such a lesion may yet develop independently or upon the site of the first appearing sore. Chancres with their succeeding secondaries frequently follow upon both chancroidal and gonorrhœal infections.

Multiple chancres, too, are more frequent than our text books would allow us to believe. These lesions usually appear simultaneously or at least within a

few days of each other. Intraurethral chancres are less common, but their possibility should never be lost sight of. I have found them twice, once complicating a gonorrhœal urethritis.

With regard to innocent and extragenital primary lesions great difficulty will always be experienced in forcing some physicians to a proper diagnosis. Unfortunately these cases are not uncommon, and one should always be on his guard regarding the diagnosis of any lesion persisting for an unusual length of time, especially if located about the mouth or throat. Physicians themselves frequently contract syphilis in the line of duty and then fail to recognize their own condition. The only way to avoid error is to exclude primary syphilis in all cases of venereal sores and single persistent lesions elsewhere.

The secondary efflorescences may be complicated, modified or masked by numerous cutaneous phenomena. The eruption is deceiving when coincident with eczema, psoriasis, and other chronic skin diseases. It is still more difficult to differentiate or diagnose syphilis concurrent with measles or scarlet fever, in which case not only the skin but also the condition of the mucous membranes adds to the difficulty of the diagnosis. In all cases where the exanthem persists beyond the usual length of time and presents any unusual points, and especially in the presence of adenopathy and unusual throat and mouth symptoms, syphilis must be excluded. It should also be remembered that frequently the secondary cutaneous eruption is an evanescent one easily overlooked by both patient and physician. In such cases one is not likely to find concurrent lesions of the mucous membranes. In addition to the varying type and degree of the eruption and the possibilities of the presence of other diseases, we must remember that it may be greatly modified, delayed or aborted by early medication. The early use of mercury may so influence the course of the trouble as to absolutely prevent any apparent secondary manifestations, while a similar use of the iodides may cause a drug eruption more alarming to the patient than the unmodified lesions of the disease itself.

While it is usual that the disease develops gradually with fairly accurate intervals of time between infection, primary, secondary and tertiary stages, still these intervals are not invariable. Not infrequently the secondaries appear during the presence of the primary lesions and cases have been reported in which gummata were in evidence before the initial sore had disappeared. The headaches and various eye troubles may occur early and when so doing are likely to persist for some time.

However frequent are the mistakes of diagnosis in the primary and early secondary stages, it is the late secondary and tertiary stages as well as the hereditary cases which are more often overlooked. Gummata, necrosis and all forms of nervous symptoms are treated for everything but their true cause. I have seen one of the best surgeons in the country operate on a tibial gumma, failing to recognize its true character until too late, and then admitting that it had needed only the iodides. Nasal and palatal lesions are daily treated as purely catarrhal conditions when they are due to syphilis alone.

One of the most frequent causes for error in diagnosis is the failure to take into consideration the individual factor, the idiosyncrasies of our patients. A

physician, early in his practice having a typical case of syphilis with a fairly large persistent hard primary, followed soon after by marked secondaries, mucous patches, sore throat and enlarged glands is in danger of giving such a case a place in his mental store house as an arbitrary type. The next case, failing in some of the characteristic qualities of the first is discarded as non-specific, simply because the doctor fails of proper medical acumen and does not understand how a case can be syphilitic when there is neither an apparent skin eruption, mucous patch or history of either.

As there are cases of walking typhoid which do not rupture and are mild throughout their whole course, so are there many and many cases of syphilis so mild that the patients appear to suffer but little and rarely manifest symptoms of their disease. Unfortunately such patients in transmitting their disease do not transmit the same degree of apparent attenuation. A man with the mildest type of syphilis may infect another who will suffer from the most virulent manifestations. It is not the form or character of infection which determines the severity of the disease, but the host who receives the infection. The virus does not itself become attenuated, as regards its effect upon others, at least not by inoculation. It is true that succeeding generations of a family specifically tainted, hand down to their offspring a gradually increasing vigor and an attenuated virus or poison which eventually may become apparently extinct as regards transmission by either inoculation or heredity.

As illustrating both the individual factor and multiple lesions, I wish to cite the cases of three young men who came to me on three successive days in July, 1903. They were all strangers to each other. They had been exposed to the same source of infection at about the same time. Two had typical primary lesions differing only in size. The third man had three small lesions, each distinct and characteristic. One of these patients was an unusually bright and observing medical student who could materially assist in an intelligent study of his case. He had a slight adenopathy and slight transient cutaneous eruption with rarely a small mucous patch. I was never able to detect any cutaneous eruption upon the second patient though the inguinal glands showed enlargement and upon one or two occasions he had slight sores upon his tongue and mouth, undoubtedly mucous patches. To all intents and purposes he has never had an uncomfortable symptom from his infection. The third patient and the one with multiple lesions, had more marked glandular trouble, a pronounced cutaneous eruption with rapidly appearing and recurring mucous sores, followed soon after by severe headaches and other nervous and circulatory disturbances. He is better now, but he has had to be most thorough and persistent in his treatment since the day of the appearance of his primary lesion.

The source of the infection in these three cases was from the same woman, and at about the same time, the difference as manifested by the three patients, was due to unknown factors in each individual. Without having the full facts (the three patients and the one source of origin) one might easily have concluded he had been mistaken in the original diagnosis of the primary lesion.

As we have spontaneous recoveries from other diseases, so must we frequently have from syphilis. The failure

to diagnose such a case might do no material harm to the patient, but during that period of time in which his malady was sufficiently active to be transmitted, he might infect many others who would suffer all the serious consequences ordinarily incident to syphilis.

Hereditary syphilis will always be difficult of recognition, except in those few cases where we are able to secure a clear history of the patient and of his or her parentage. It is undoubtedly fortunate that the pregnant syphilitic mother frequently aborts; while the offspring of syphilitic parents, if not stillborn, rarely matures. As the interval of time between infection and conception widens, if the disease is combatted by proper treatment, the chances for the life of the infant increase. Its condition and development will depend entirely upon the above conditions.

If a non-syphilitic mother, pregnant by a syphilitic man, be given anti-specific treatment during the period of her gestation, the effects of the hereditary taint on the paternal side may be greatly modified.

In any of these cases of attenuated heredity, immediate symptoms may be slight or absent for months or years. The teeth of the second dentition will, however, usually show Hutchinson characteristics. The period of puberty is likely to be an unsually trying one. Nervous symptoms of a varied type are likely to appear, and true or pseudo epileptiform seizures may occur. In all such cases a diagnosis is difficult.

Considering the foregoing facts, the insidious character of the disease, its anomalies and the unlimited number of possible complications, those who practice medicine must in every case eliminate or treat syphilis.

Congenital Absence of Tibia. Transplantation of Fibula. Arthrodesis at the Ankle Joint.—T. H. Myers' patient was a boy of two years, who was perfectly developed except in the right lower extremity, from which the tibia was entirely absent. The femur was normal in shape, but slightly atrophied, and the head of the fibula articulated loosely with the upper and posterior part of the external condyle of the femur. The foot was in marked equinovarus. The leg was two and three-quarter inches shorter than the other, and, as it was useless for walking, the child had always gone about on his knees. As there was no reaction of degeneration among the leg muscles, it was thought that development would follow the use of the limb if this could be secured. The head of the fibula was accordingly freed from its attachments and brought into position between the condyles of the femur, where it was secured by suitable manipulation of the ligaments. The object of this operation was to lengthen the limb (about three-quarters of an inch was gained) to secure a stable support for the body weight, and to preserve the mobility of the joint. The ankle joint was then opened, the external malleolus cut off, and the fibula placed squarely on the astragalus and united to it by sutures. The object was to lengthen the limb, to correct the deformity, and to secure a stable position of the foot. Recovery was uneventful, and the boy now, ten months after operation, can walk about all day with a splint, can flex his leg 90 degrees, and can almost fully extend it. The author then reviews the etiology of the deformity and cites six other cases, which he says are all that have been treated by transplantation of the fibula. While in cases of this sort a splint and high shoe will probably always be required, still this is usually preferable to the alternative, which is amputation.—*Medical Record*, July 15, 1905.

The Journal of the Michigan State Medical Society

All communications relative to exchanges, books for review, manuscripts, advertising and subscriptions should be addressed to Editor A. P. Biddle, 57 Fort Street West, Detroit, Mich.

Subscription Price, Two Dollars per year, in Advance

AUGUST, 1905

Editorial.

THE 40TH ANNUAL MEETING AT PETOSKEY.

The 40th Annual Meeting of the Michigan State Medical Society was held during the last three days of June at the New Arlington Hotel, Petoskey, under the auspices of the Emmet County Medical Society, to the members of which the thanks of the Society were formally extended for the completeness of arrangements and the untiring efforts made for the comfort of the guests. The weather was ideal and in point of attendance and in every other way the meeting was gratifying.

The Council met the evening before and drew up its report for submission to the House of Delegates, inviting attention to the steady growth of the Society, to the condition of the County Medical Societies, to the various needs of the profession throughout the state, with appropriate recommendations for future action.

The work accomplished by the Society through its members during the year is best expressed in the admirable and exhaustive address of the retiring president on "The Past and Present Status of the Medical Profession in Michgan:"

"The membership in the County Society, the most important unit in the County, State and National Societies, is being well maintained, and the cordial relations between physicians, where formerly contention and prejudice had full swing, is most noticeable in all the counties where societies have been established under the new order of things. These results obtained through unity and re-organization have been the principal rewards and assets of the Society, and if maintained will still continue to bear fruit in the future. As a result of this organization it has been an easy matter to obtain proper and effective legislation in the matters of interest affecting the profession, and the nomination and election of one of our most worthy members to the regency of our State University has demonstrated not only the deserved popularity throughout the state of the member-elect, but has also demonstrated the practical purposes and result of state organization.

The several committees have one and all been more than ordinarily successful, due to their persistent labor and the intelligent handling of their several interests.

The Committee on the Establishment of a Sanitarium for Cases of incipient Tuberculosis. .

The labor and difficulties connected with obtaining the committal of the state to the objects of this committee were of very great magnitude, and were overcome by the continued and persistent efforts of the chairman and the members of this committee, aided by the active support of the State Organization represented by the several county societies. It is true that the appropriation made by the legislature was small, but most important is the fact that the state has been committed to the principles involved in the bill, and the work thus favorably begun guarantees its continuance under the most auspicious circumstances in the near future. An official commission under the Act will be appointed by the Governor and this commission will have the authority of the state to continue the matter along conservative yet progressive lines, and to carry out the ideas of contending with and limiting in the future the reign of the white plague in this state.

The Committee on Legislation and Public Policy.

The accomplishments of this committee this year have been most substantial and gratifying. It has to its credit no less than three bills introduced, resulting in three acts without amendment or modification. These acts passed are:

First. An act dividing the State Board Examinations into a primary and a final examination, allowing students in recognized medical colleges to be examined upon and receive credit in those subjects completed in such medical schools at the end of the second year.

Second. An act amending Section 3, Subdivision 6 of the 1903 medical act, adding to the discipline clause a provision against the employment of solicitors, runners or cappers by licensed practitioners, or the payment in any form for the procuring of patients.

Third. An act amending the penal section of the medical act providing for the trial of all cases of violation of the act in circuit courts in place of in justice courts.

All the above acts were given immediate effect.

In addition to the above acts the committee were most active and successful in defeating objectionable acts introduced with the object of modifying the provisions of the legal requirements for medical registration in this state, most important of which was the optometry bill, designed to legalize the treatment of defects of vision by so-called opticians, who carry on the somewhat doubtful business of fitting glasses and curing headaches. This bill will undoubtedly be reintroduced next session, and in the meantime county societies should prepare themselves for effective action at the proper time.

The Committee on Reduction of Time, in which Suit may be brought against a Physician for Malpractice.

The activity and good judgment of the chairman has been rewarded by the passage of an act reducing the time record from three years to two years, a very substantial modification of the former unjust provision.

The Michigan member of the National Legislative Council of the A. M. A. has as usual been most active in his services to the cause of legislation, and has accomplished a great deal in the matter of furnishing those in authority with necessary information and advice, in order that the complex subject of medical legislation could be more readily understood and measures for its promotion be practically undertaken."

And the degree to which the profession through its State and County organizations is influential in shaping medical history cannot be better stated than by quoting again from the address of President Harison:

"Finally, to summarize the past and present status of the profession in Michigan:

First. Prior to 1883 we had without any legislative restrictions whatever absolute free trade in the practice of medicine in this state.

Second. Subsequent to 1883 and up to 1899 we had legalized free trade in the practice of medicine, owing to the fact that the registration act passed in 1883 was insufficient and simply recorded registrations in place of regulating such registrations. During this period of sixteen years there were some 1,500 medical registrations yearly in the state.

Third. During the period from 1899-1903 the Chandler Medical Act was enforced, resulting in the regulation of the practice of medicine in this state, driving out of the state or compelling them to cease practicing, some 1,500 persons who had gone through the form of legal registration under the 1883 act upon the qualifications of bogus medical diplomas or other insufficient qualifications. During this period only the diplomas of United States medical colleges of the first class were recognized as qualifications for registration, all other applicants for license to practice in the state being compelled to take the board's examination.

Also during this period the re-organization of the State Medical Society took place and was a most important factor in the advance of professional standing and increasing the qualifications for medical registration. The yearly registration during this period averaged five hundred.

Fourth. During the period from 1903-1905 to date, the Nottingham Amendments to the Medical Act of 1899 have been in force, resulting in raising and regulating the requirements of Preliminary and Medical Education for registration in the state to such a standard that at the present time Michigan's requirements for the legal practice of medicine is on as high or even higher plane than that of any other state in the Union.

In the important subject of medical reciprocity Michigan is held by the profession throughout the Union as not only an originator but also as a leader in the matter of effective action and ability to overcome in a practical manner problems heretofore held impossible of solution.

The State Medical Society has during this period grown satisfactorily in numbers, organization and influence, and has demonstrated that in public questions affecting the interests of the profession it is a power to be reckoned with in the proper and righteous solution of such questions.

The yearly registrations under the 1903 Medical Act average a little less than three hundred.

In comparison with other states the three forces involved in and responsible for medical status, namely: Medical Legislation, Standard of Colleges and an Organized Profession represented by the State Medical Society, I think you will agree with the conclusion that taking into account the status of the profession in 1883 and again in 1899, the present, or 1905 status of the profession in

Michigan, is not only eminently satisfactory and gratifying, but most surprising in its advance in so brief a period."

One of the most noticeable features of the result of the work of the medical profession is the great strides suggested in preventive medicine, which can, without saying, be made successful only through effective organization. The report of the Committee to establish a State Sanitarium for the treatment of the incipient stages of tuberculosis, the Oration of General Medicine (The Administrative Control of Tuberculosis), the report of the Committee to secure data regarding the prevalence of Venereal Diseases in Michigan, of the Committee to encourage the Systematic Examination of Eyes and Ears of Children throughout the State, the papers on Communicable Diseases, on Venereal Prophylaxis, on the Medical Inspection of Schools, all invoke the aid of the members of an organized body.

In Dr. David Inglis, of Detroit, the Society secures as President for the next year the services of one intensely interested in medical matters, keenly alive to its needs and self-sacrificing to its interest; thoroughly trained by education, experience and self-culture to adorn the chair; a scholar, a forcible teacher, a writer, well known throughout the state and the land; loving and beloved by his profession; a character earnest, positive, forcible, aggressive yet withal modest; original, idealistic and often an extremist, yet exceedingly practical and imbibed with a strong common sense; humorous yet of a nervous, serious, religious and kindly temperament; a strong lover of family and of nature. He was born in Detroit about 55 years ago, the son of Dr. Richard Inglis, who graced the chair of presidency of this Society in 1869; graduated from the Detroit College of Medicine in 1871, and the Bellevue Hospital Medical College in 1872; has been engaged in active practice in this city since that date and is at present Professor of Mental and Nervous Diseases in the Detroit College of Medicine, Consulting Neurologist to Harper Hospital, etc., and a member of the various local, State, National and Special Associations.

The Society holds its next Annual Meeting in Jackson in 1906.

A. P. BIDDLE.

COMPETITION BETWEEN DOCTORS.

When two doctors want the same thing there is competition—each wants it—both cannot have it—therefore the hardest fighter secures the prize. No competition is possible when each has more than he desires, or when one is content with "the crumbs which fall from the other fellow's table."

The greater expense of conducting under graduate medical colleges, has reduced the profits, and if modern medicine were faithfully taught by competent men, unquestionably three-fourths of the present schools would be wiped from the slate. Some see this and realize that the public sentiment will support state licensing boards in enforcing present laws, and even more stringent ones. Experience has proved that competition of medical colleges is disastrous to the profession as a whole and to the people. Hence we have seen one college after another join some other or go out of business.

Those seeking that peculiar form of advertising, which comes from a "bluff" at teaching, have turned their attention

to gather in a few doctors and for a short time, to show how they do work, in the expectation that thus they will get consultations, sufficient to pay for their trouble and actual expense.

These post-graduate schools have sprung up in most medical college towns, but is questionable whether they have met the anticipations of their founders.

As we have seen one has soon been followed by another so dividing the field. Then both make specialists in from four to six weeks. As the trouble and expense of becoming a high priced specialist has thus been reduced to a minimum, a large number of specialists occupy the old fields. These pick up and manage most of the cases that formerly went to competent specialists. Farther, their diagnostic acumen finds cases that do not exist. Hence, while the post-graduate teachers get a small fee, and some personal advertising, he has manufactured specialists to pick up the cases formerly coming to them. If the men were made competent to care for the cases the laity would not suffer, but rather profit. In another the post-graduate teacher cuts his own throat in the lowered price of professional service by the specialists he has aided in making. As the cost of a six weeks' course is less than a six years' one, so can the post-graduate afford to work for less than the six year one.

Buying business is a modern method of meeting competition. One way of buying business, is to frankly offer the general practitioner, twenty-five or fifty or ninety per cent. for cases sent him. The rates for such goods tend to increase to the market limit.

Shrewd drummers have entered the trade of fereting out those needing expert surgery, and selling them to the highest bidder among doctors. This is especially prevalent about such places as Mt. Clemens, Mich., or Little Rock, Ark., but in minor degree it prevails in all noted medical centers.

Another set of doctors hunt up life insurance agents, and offer to doctor themselves and families on condition that they send them life insurance cases for examination. If this does not get the work from the regular established examiner, additional price is offered.

That competition, such as described; finally results in damage to those who engage in it, and to the profession as a whole, is overlooked in the mad endeavor to increase reputation and bank account.

Fair competition of medical schools, or private practice—a competition which benefits the profession, and honors all engaged therein—is welcomed; not that which exalts unwise standards, or degrades by underhand work.

THE FOES OF RATIONAL MEDICINE.

Lists of the foes of rational medicine, made by each physician would differ widely, but many would agree with one made by Dr. H. W. Wiley, in a late address published in *Science,* June 2nd, viz., the quack, the charlatan, and the impersonal physician. He defines these thus: The quack is a man possessing possibly high medical training and skill, but devoid of those principles of ethics without which the honorable practice of a profession is impossible.

The charlatan is a man necessarily devoid of any medical training or ability, who plays upon the feelings of his pa-

tients and administers nostrums of no value and applied with no science.

The impersonal physician is the nostrum, the patent medicine, and the proprietary remedy.

These remedies may have merit but taken as they are without the advice or consent of a physician they become not only one of the greatest foes of rational medicine but one of the greatest dangers to the public at large.

There is no justification for using the columns of the public press to deceive the public, to excite fears of dangers which do not exist and create hopes that cannot be realized.

It is for medical organizations, to win from their evil ways the quack and charlatan, and to prevent the manufacture of a fresh crop. Only thus can the medical profession stand before the people a self-respecting body and command the respect of all others.

It is for organization to make effective measures for teaching the laity the fallaciousness of a blind trust in any drug, without the guidance of skilled knowledge and honest purpose.

The progress of rational medicine is conditioned on the laity casting their unknown medicines, their lying advisors, and their ignorant leaders to the moles and the bats, and trusting upon those possessing modern knowledge with the skill to apply it to both the prevention and cure of disease.

Of these foes, the quack is the worst, because of his greater learning, larger skill, and deftness in managing human beings—he is often seen in high places, sitting among the righteous.

PENNSYLVANIA'S GOVERNOR ON OSTEOPATHY.

In spite of strenuous efforts the Pennsylvania House and Senate passed the bill to license osteopaths. At this juncture a number of Philadelphia physicians, interviewed the Governor, and he vetoed the bill.

This bill would have made it a penal offense for a doctor now licensed to practice medicine, to practice osteopathy.

The Governor says that after painstaking inquiry he was unable to determine the real nature of osteopathy. He believed however that it must contain somewhat of value in managing disease. This being true why should the state forbid doctors from using it? This would certainly be a loss to physicians, a wrong to the laity.

The passage of the bill would commit the state to a system of practice which excludes medicine and surgery. If these be useless of course they will not be used; but if occasionally valuable why exclude them from use?

Already there is a Medical Council of Pennsylvania which has charge of issuing licenses for physicians; osteopaths should pass this Council, then they may follow what facts or theories they choose in relieving the sick.

In Michigan we have operating a special law licensing osteopaths. They pose as doctors, relieving or seeking to relieve the suffering and taking pay therefor. Before the laity they are on the same plane as the most highly educated physician. Confessedly they are ignorant of what the state has established as the standard for its physicians else they would have passed the state's examining board, in operation long ere they applied for a special license.

The state's action in the matter was peculiar; by implication is told the world, such persons as pass my examining board, shall have a monopoly to care for the sick. You must spend many years, much money, labor hard during the best of your lives in preparation to pass my board, but all others must do the same. In face of this shortly thereafter the state admitted osteopaths to a practice of medicines by a different board, with far less requirement of time, money, etc.

Farther, diploma from an osteopathic college suffices to admit to medical practice—a thing not permitted the other state examining board.

As we said in a late issue with reference to optometry, the tendency is to secure entrance to the emoluments of the medical profession, by a shorter route than that first laid out—so depriving the people of that thorough training they might have in their doctors, and substituting a cheap article.

It is a clear breach of faith for legislatures to admit these cheap substitutes, for the expensive real doctor—the process however will continue unless the laity are educated to comprehend their own interests in the matter. Physicians must be the teachers, both indirect and direct. Pennsylvania's Governor has given us a good lesson.

"THE WANDERING HABIT" IN PATIENTS.

A generation ago, patients as a rule stayed with their doctor while he was able to serve them. Most never thought he was other than the best possible.

Now few if any retain such a confidence in their first doctor. Older persons among the laity frequently remark on the change.

With this change has come a criticism of the doctors by the laity—that has induced a wide-spread skepticism of the profession in general. This skepticism has furnished a fertile soil for the growth of all sorts of "isms," "pathies," "cures," and "proprietary or patent medicine habit."

The evident cause of this change is a dissatisfaction with their doctor—springing from manifold sources; as varied social conditions, inhering partly in the doctor and partly in the patient. Additional factors are the modern hospital, free clinic, specialism, corporate and fraternal societies, and the pernicious influence of the newspaper, which daily teaches them to trust medicines without doctors, and doctors who support the press can beat the devil in lying.

We desire to emphasize a remedy available to every physician that will aid in preventing additional skepticism, if only faithfully employed.

Briefly, let every doctor who sends a patient to a specialist send a history of the case with the patient; and when the specialist returns the case to his or her doctor, send a carefully written statement of diagnosis, prognosis and treatment, account of operations done with reasons therefor, with suggestions for future conduct of the case. By this method it will be possible for the patient to have faith in both doctors—because both can tell the same story and make clear that the patient is securing the needed service. Farther, after a little the two doctors can work practically as one, and impress the laity with their power as a team, and so prevent the growth of the "wandering habit."

Dr. Denney (*Boston. Med. and Surg. Journal,* Feb. 2nd) urges hospitals to send a report of each case to the doctor sending it to the hospital, giving the essential history while in the hospital, the results of important examinations and operations or other treatment, with diagnosis and suggestion for home treatment. He thinks that in a hospital of three hundred beds the house officer could dictate this information to a stenographer in fifteen minutes daily as an average.

He is confident that such service of the hospital to its constituent doctors, would increase the faith of patients in both hospital and doctors and so check the wandering patients. Certainly it would educate physicians in the newer aids to practice, and promote medical research by encouraging the family physician to observe more closely and publish the results.

Such practice would restrict the recrimination of physicians and hospitals; as they would be intelligent partners in caring for the same patients and have a mutual confidence born of common knowledge, mutual helpfulness and fair dealing.

As the functions of the hospital is to care for the sick, educate physicians and increase medical knowledge, Dr. Denney urges it to spend a trifle of its income in cultivating an intelligent fellowship with doctors sending it patients.

All physicians and specialists who have practiced the interchange of knowledge respecting patients they serve in common, will agree that their own and their patients' pleasure and profit have been enhanced thereby, and so the "wandering habit" checked.

If only such practice were adopted by all physicians and hospitals, the same habit might be extinguished.

The JOURNAL commends this matter heartily to its readers, and urges its discussion at branch meetings, and adoption by the several hospitals with which they have relations.

Just so far as each acts on the suggestion, will he add to the power of professional organization in Michigan. Begin now ere you forget—do your part to check the wandering habit.

County Society News.

LIVINGSTON COUNTY.

The Livingston County Medical Society held a meeting June 13, 1905. W. C. Huntington, of Howell, read a paper on "Treatment of Tuberculosis."

Abstract—

While the present sanatorium treatment of tuberculosis is the best treatment yet practiced, it is only the first step in the right direction. Its limitations are too great and its agencies too little under control. It involves expense which too few can possibly meet, and separation of the patient from the regular family physician and friends.

It is the attempt to surmount these limitations and render the treatment of tuberculosis practical at all times and in all places, that has prompted the scheme which you are asked to consider.

The four great factors in the successful treatment of tuberculosis are rest, fresh air, cold and feeding.

As the matter of feeding does not involve any special limitations as to time or place it will not be considered at this time.

In order to judge approximately how much rest a patient needs and how it should be taken, it is necessary to consider the nature of the benefit derived from rest.

It seems generally understood that the reduced metabolism resulting from rest, reduces temperature and allows accumulation of the material and psychic elements which constitute vitality; but is this all, or even a very important part of the benefit derived from rest? Does rest have an equal effect upon temperature in other febrile cases as in pulmonary tuberculosis, and if not, why not?

Before attempting to answer this question let us inquire why it is that tuberculosis almost always attacks the apex of the lung first.

To myself it seems largely a matter of gravitation. Two-thirds of one's time is spent in upright positions. We all know the tendencies of the circulation to gravitate away from superior portions, especially in cases of debility. We also know that the lungs are held in position largely by atmospheric pressure and that this force produces the greatest compression of blood vessels in the portion of lung which is at the time uppermost, and hence for two-thirds of the time the apices are relatively anaemic and consequently their tissues are first to suffer devitalization and loss of power of resistance from malnutrition.

This being true obviously the first step in treatment should be to maintain equilibrium of circulation or perhaps even relative hyperaemia of the affected apex, which can only be done by rest in the horizontal position.

As a tubercle is a non-vascular burrow within which the bacillus is safe from intrusion, the only manner of cure is to surround it with a capsule which will inhibit migration of germs and, contracting, squeeze out the soluble portions until it is reduced to fibrosis or calcification, or both, or form a cavity wall when ulceration discharge of contents occurs.

This incapsulation is accomplished by means of the circumscribed pneumonitis which surrounds the tubercular focus, and hence this inflammatory process must be regarded as constructive rather than destructive. It is the latter only when owing to inferior organization the formed tissue becomes the home of the bacillus rather than of the leucocyte, in which case it partakes of the nature of the central mass and undergoes the same changes and, in fact, constitutes an extension of the disease. In producing a cure, the capsule must be constructed through air cells and across bronchi which are constantly disturbed by the respiratory act, which disturbance, except during absolute rest, is frequently varying in degree.

In addition to this, each inspiration brings in a swarm of germs whose function it is to disorganize and liquify the forming capsule and in doing it, generate toxines which poison the system and lower its vitality and power of repair.

The task for nature in these cases is much like the repair of a broken bone. Under ordinary circumstances union occurs, but if there is too much disturbance we may get non-union, and the case is still worse if the fracture is compound with free access of unsterilized air. Tuberculosis tends to recovery when it occurs in tissue whose function does not too greatly disturb the process of repair, and to which air does not have access, but in pulmonary tuberculosis there is constant disturbance, with free access of air, and the conditions are similar to a constantly disturbed compound fracture.

Now the recumbent posture, with the affected lung never uppermost, approximates the conditions to those in which recovery takes place spontaneously as closely as it is practicable to do.

How long should the patient remain in bed? This depends entirely on the individual case.

When my son arrived at the sanatorium he was not weak enough to be unusually fatigued by the journey and yet he was put to bed in the infirmary and kept there two weeks. During this time his chills ceased, his temperature subsided, and he gained 6½ pounds or almost ½ pound per day. As his recovery was exceptionally rapid, the time spent in bed was less than would ordinarily be best. As an illustration of the other extreme, while there I met a young man in his bed on the veranda of the infirmary who had at that time been eight months in bed and was improving. Three months later he left his bed enough to go to his meals, subsequently left the institution much improved, and is now living in Grand Rapids, Mich.

As a general rule the patient should probably be in bed whenever his daily temperature rises above 100 degrees; for Dr. King told me that his greatest handicap was the unwillingness of patients to remain in the infirmary long enough.

Since fresh air has proven so beneficial, might not sterilized air prove more so, especially if it could be more conveniently and thoroughly applied? In pursuance of this idea I have devised an apparatus for the administration of sterilized air. It consists of a valvular face mask connected by a flexible tube with the sterilizer, which is constructed on the principle of the washing bottle, with broken quick lime in place of fluid, above which, resting on a screen is cotton wool through which the air is filtered. Contact with the quick lime is expected to eliminate some of the carbonic acid and moisture, and the filter to remove dust and germs. A much larger sterilizer than the one shown would probably be better. It would provide longer contact between the air and lime, with increased elimination of carbonic acid and moisture, and the increased area of filter would allow the passage of the same amount of air with less resistance. This resistance should not be sufficient to promote hemorrhage or induce fatigue. The resistance of this sterilizer is hardly appreciable and probably does not call for more effort than respiration at high altitudes. The mask should be fastened by a flexible band, so

as to raise readily for the purpose of expectoration.

Cold is one of the most potent factors in the treatment of tuberculosis. It reduces fever, promotes appetite, digestion and assimilation and increases the weight and vitality; but cold and fresh air cannot both be had ordinarily, except in cold weather. With the use of the sterilizer only moderate ventilation of the room would be required and hence the temperature could be much more under control. By packing the sterilizer with enough ice and salt, not only the temperature of the inspired air, but that of the entire room, could be reduced to perhaps any necessary extent.

As "the best laid plans of mice and men gang oft aglee" so all of this might on trial prove disappointing, but I hope that it will at least serve to give us something to think and talk about.

R. H. BAIRD, Sec'y.

OAKLAND COUNTY.

At the meeting of the Oakland County Medical Society June 13, 1905, D. G. Castell of Pontiac read a paper on "Choice and Administration of Anesthetics."

Abstract—

The responsibility of selecting the anaesthetic for the case in hand, and carrying out its proper administration, is no small matter. In many operations the anesthetic is the major risk, and in every case, even if perfectly sound and healthy, should the patient claim the constant and undivided attention of the one administering it. Accidents happen to the perfectly sound and healthy subject. This is especially true with chloroform, as its risks are proportionately greater than with ether; for the sound and healthy person may take ether with a minimum of danger. As a rule, the laity fail to appreciate the relative importance of the anaesthetist, and have not been educated to properly remunerate him for the responsible services he renders.

To wisely select the anaesthetic for a patient, must infer, on the part of him making the selection, a correct knowledge of the drug; as to its chemistry, its physiological effects, both direct and indirect, and its dangers and limitations; and to properly adminster the anaesthetic one must equally well know the patient, as to his physical condition, and, when possible, his idiosyncrasies.

Anaesthetics may be classed as general and local. Chloroform, ether, nitrous oxide, ethyl chloride and ethyl bromide, and mixtures of chloroform, ether and alcohol, are the general anaesthetics in use.

The use of nitrous oxide and ethyl chloride, in general practice, on account of the complicated and cumbersome apparatus for their administration, are not practicable. The mixtures of chloroform, ether and alcohol are unreliable on account of the difference in their volatility. Of chloroform and ether, each has its merits and its limitations. Chloroform is the more dangerous of the two. The margin between its surgical anaesthesia and the lethal dose is much narrower than with ether. Its dangers appear quickly, and often with little warning. Chloroform depresses the heart and circulation, lowering the blood pressure, while ether stimulates the heart, raising the blood pressure and stimulates the respiration; but if pushed excessively is said to cause death by paralysis of the respiratory centers.

On account of its stimulating effect, ether is not adapted for cases in which the respiratory tract is sensitive or irritable, as in inflammatory conditions, such as laryngitis, bronchitis, etc., or in cases in which the breathing is interfered with, as in cases of pressure from large goitre, thyroid, pluritic fluid or marked acites, etc. It is not adapted to use in case of infants, the aged, or those in which there is a weakened condition of the vessels, as in atheroma.

Ether has a very stimulating effect on the secretions of mucus and saliva, which in some cases is very annoying. It is found that a hypodermic of atropine, or morphine and atropine, or hyoscine hydrobromate, has a very beneficial effect of lessening and controlling these secretions.

Of the relative safety of ether and chloroform, statistics vary somewhat, yet accidents happen about once in three thousand administrations with chloroform, and about once in fifteen thousand with ether.

Ether should always be given the preference, unless for some reason contraindicated. Yet ether, on account of its greater safety, is often allowed to be given by the inexperienced, with the chance of the patient getting more than is necessary, becoming soaked and more or less choked up with mucus, thus greatly increasing the risk.

No one should assume the responsibility of administering chloroform or ether unless he is thoroughly acquainted with all the signs and symptoms, and is prepared to do the right thing and do it promptly in case of emergency. Every person does not act the same under anaesthesia. There is no one safe and reliable sign, but all

signs and symptoms must be constantly watched and one be guided by the general picture.

In the use of chloroform, when the pupils narrow down small and remain unmovable, the conjunctive reflex disappears, all muscles relax, especially the muscles of the jaw, and the breathing becomes regular and deep as in profound sleep, we have a picture of surgical anaesthesia. Yet these signs are not always to be relied upon. Rigidity of the jaw muscles may persist, in some cases, even when the patient is thoroughly under the anaesthetic, and it would now greatly endanger the patient to push the anaesthetic, hoping to relax these muscles. In such cases, if the jaw is worked back and forth, this rigidity will pass off and the muscles relax without more of the anaesthetic. The pupils do not always give reliable evidence. After they have been once caused to dilate from pain, as from the extraction of a tooth, or the dilating of the sphincter, they do not always contract down again, and it would be unsafe to push the anaesthetic with the hope of so doing.

With chloroform the condition of the pulse must be constantly watched, also the skin and mucous membrane—the ears, nose and lips. The cyanosed skin and membrane indicates need of air; a pale, ashy hue to the skin should excite our fears at once, as it indicates danger, and active measures are necessary to avert collapse. The handling of sensitive parts often demands temporary withdrawal of the anaesthetic, when the temptation is to crowd it. A few deep inspirations of the anaesthetic at this time might be more than the patient could stand, and certainly be more than needed. A fixed, dilated pupil under chloroform means danger and must not be ignored, as collapse is imminent.

For impending collapse heat is of the utmost importance. Hot injections (115 degs. F.) by the bowel, hot external applications, friction and massage; subcutaneous injections of sterilized normal salt solution, or better still, intravenous injections, are of great value in bringing up the blood pressure and restoring the circulation. Deep injections of ether into the muscles, hypodermics of strych., atropine, digitalin and glonin, rythmic traction of the tongue, artificial respiration, compression and massage over heart, lowering of head, and other measures as indicated, must be thoroughly understood by him who assumes the responsibility of giving the anaesthetic, and he must be prepared to execute them with promptness, as occasion arises.

The manner of administering the anaesthetic is of much importance. It is of the utmost importance that the patient gets plenty of fresh air, with ether as well as with chloroform. The closed method of administering chloroform or ether should be condemned. With the closed inhaler, such as the Clover inhaler, asphyxia from lack of air, or breathing foul air, constitutes part of the anaesthesia, and thereby greatly contributes to the risk. Such inhalers are unclean, and there is some risk from conveying infection in this way. The open mask or inhaler, in which fresh gauze may be used each time, and which provides for free access of fresh air, is the only safe and proper way to administer ether or chloroform.

The room in which the anaesthetic is given should be at a temperature of about 80 degrees F., and should be well ventilated. There should be good light, in order that any change in the color of the skin, condition of pupils, reflexes, and other signs and symptoms may be clearly observed.

The patient should always have a preliminary examination, and preparation when possible. The urine should be examined, especially if the anaesthesia is to be of long duration. The bowels moved by a saline laxative, and no solid food taken within forty-six hours of the anaesthetic; yet some stimulating liquid food, two or three hours before its administration, puts the patient in better shape for the anaesthetic and the operation. In examining the patient do not excite the patient by dwelling on any one point, yet have him feel that you have been thorough, and thus gain his confidence, and set aside any fear he may have entertained as to his fitness for the anaesthetic. If possible have the patient undressed, and in a loose robe, or in his underclothes. If not undressed inspect his clothing carefully, that there may be no interference with the circulation and the breathing. Inspect the neck bands, wristbands, waistbands, garters, shoe lacings, and see to it that the clothing does not bind under the arms or elsewhere. Inspect the mouth as to false teeth, tobacco, gum, or any foreign substance the patient in his nervousness may be holding there.

When ready to give the anaesthetic have everything quiet. The patient should not be disturbed by the rattling of instruments and other preparations, or be within hearing of conversation relating to the operation. The more composed his mind the better, as the going under stage is recognized as a period of danger.

Have the patient assume a natural, easy position, flat on his back, with very little, if anything, under his head, and when necessary have him protected with a light, woolen blanket. Begin the anaesthetic by giving a small amount, and

hold the mask well away from the face at first, to avoid the sense of suffocation. Give the anaesthetic gradually, and as soon as the higher centers show signs of co-ordination push the anaesthetic until they are under control. Keep the jaw well forward, and push the anesthetic, when warned by the preliminary hiccough, or retching, of the onset of nausea and vomiting. Do not let the surgeon hurry you, or commence before you give him permission. When the patient is brought up to surgical anaesthesia, hold him there. Very little additions of the anaesthetics, if properly applied, will now be necessary.

The patient is now completely in your hands, and you must think for him, feel for him, and carefully guard him from harm. Do not allow his chest to be weighted down with a tray of instruments, or the assistant's arm. Guard against the patient's arms getting off the table, or twisted under him, with the chance of causing pressure paralysis. See to it that the patient's throat is kept clear. When the patient vomits, or throat fills with mucus, turn his head to one side, so it may be expelled, or run into his mouth, where it may be swabbed out without running the swab into his throat. Guard against unnecessary exposure and chilling of the patient; keep him warm, and when such measures are indicated do not wait until after the operation; use hot water bottles and other measures as soon as there is evidence of their need. Do not continue the anaesthetic a minute longer than is absolutely necessary. The less the patient is moved after the anaesthetic is discontinued, the less likelihood of nausea and vomiting. Food is not usually well borne for twelve to eighteen hours afterward. To allay the thirst a teaspoonful of hot water may be given every fifteen to twenty minutes, a little salt added to the water is beneficial. The injection of a quart or more of normal salt solution, by the bowel, is helpful in case of suppression or delayed secretion of urine.

The subject of local anaesthesia has of late received much attention. Their use, as a rule, entails much less danger to the patient, and for the simpler, minor operations there is certainly no excuse for the general anaesthetic with its attendant risk and discomfort. Local injections, or the ethyl chloride spray conveniently enable one, with little discomfort, and no danger to the patient, to incise boils, abscesses, and like conditions, to remove growths and tumors in the skin, and adjacent structures. The ethyl chloride spray, very conveniently enables one to trim ragged tissue and pass stitches. Local injections are being successfully used in the operations on piles, prolapsus ani, varicose veins, hydrocele, varicocele, and for hernia; and in cases in which a general anaesthetic is contraindicated, for major operations, as abdominal operations, or removal of the breasts. Yet the local anaesthetics have their limitations, and are not adapted to all cases. With the nervous, sensitive patient, it is not entirely free from shock. The slight attendant discomfort to the patient, in some cases, might hurry the surgeon to complete his task with less attention to the detail than he might exercise under the general anesthetic. Solutions of cocaine, eucaine, normal salt and sterilized water, and ethyl chloride, and ethyl bromide sprays are the local anaesthetics most generally used. Solutions of adreniline chloride are used in the solutions of cocaine, and eucaine, lessening their toxic effect, prolonging the anaesthesia and lessening the hemorrhage.

To anaesthetise the skin the injection is made into the skin, not under it, with a fine needle, gradually forcing the fluid into the skin until a white, shiny wheal is formed, then pushing the needle along to an adjacent area, until the desired surface is anaesthetised. The deeper structures are then injected, and when a nerve supply the structures operated on, is exposed, the solution is injected into its sheath, causing anaesthesia of the region supplied by its branches.

On account of the toxic and untoward effect of the stronger solutions of cocaine, much weaker ones are now used, and are found just as effective. The injection of sterilized water, or, better still, sterilized normal salt solution, successfully produces anaesthesia by mechanical pressure, though such anaesthesia is of short duration, passing off as soon as the fluid is absorbed, or allowed to escape by incising the tissue.

In conclusion I would say, use the local anaesthetic whenever it answers the purpose. When a general anaesthetic is used do not any more think of placing it in the hands of the careless or unqualified person, than in placing the knife in the hands of such a person to perform an important operation.

R. Y. Ferguson of Pontiac read a paper on "The Surgical Treatment of Appendicitis."

Abstract—

To my mind there are two ways in which the life of a patient suffering with appendicitis may be menaced, either he may fall into the hands of a dangerous surgeon or into the hands of a less safe non-surgical physician. Life may terminate untimely in either case. To my mind, after seeing, feeling and in some instances even smelling, I am fully satisfied that the only rational and

safe treatment of almost every case of appendicitis is cautious, clean and timely surgery.

In every case of appendicitis there occurs a period of time up to which operation interference should have no mortality whatever, excepting the ordinary surgical mortality attributable to the anaesthetics, etc.

Of the methods and advice concerning the technic, etc., there is no end, consult your text books and use ordinary sense. Much has been said concerning the Oschner treatments. Let it be understood that this is entirely a preparatory treatment and not at all designed to displace the operation treatment. His statistics speak volumes in favor of it and unquestionably carried out with his exactness must be beneficial in many cases. It necessarily involves absolute control of the patient, not forgetting the family as well. Nowhere, in my opinion, except a hospital can this be accomplished.

The operation per se is simplicity itself and is, I am certain, within easy reach of any of us, providing inertia is not too firmly established.

Let it be understood, a great array of instruments is not required; after you have collected a trayful you will probably find you have made use of only a few, perhaps nothing but a knife, a few pairs of artery forceps, a pair of scissors and retractors. Let simplicity rule. Thus prepared and given the case, it will depend largely whether the diagnosis is an early or late one. Early and before widespread infection has taken place, the greatest precautions are to be observed to prevent additional outside infection, it being desirable to close the wound completely. Make your incision, split the muscles and use retractors. The peritoneum is easy to recognize, you will not cut the bowels unless adherent, which it seldom is. Find the appendix and remove it in the most approved manner. Cut the appendix off and close the opening with a purse string suture. That is about what they all do, in substance. It is simple and requires only ordinary skill. To keep your hands and those of your assistant and the peritoneum uncontaminated, requires a great deal more—rubber gloves are an absolute necessity. On the other hand, in late cases we are liable to be confronted with various difficult and perplexing problems. Fortunately this is not the rule and such cases often involve no greater skill than the opening and draining of an abscess. These are the kind that always get well. Do not be alarmed if you cannot find the appendix, give the pus exit and recovery will follow. Too ardent searching and mauling the bowels in the quest for the offending organ cannot be too strongly condemned, adhesions are broken up, infection spread and may be a fatal peritonitis lighted up.

Here are some of the questions that have given me anxious and perplexing moments: First of all, making myself and the patient's family understand that operation so soon is essential. The information falls like a calamity upon them and often requires a strong influence in order to have them see it in the proper light (and this is just the place where the conciliatory consultant can get in fine work with the wavering family to the detriment of the patient and chagrin of the attendant.) Along with this the downing of what is, I believe, inherent in most of us, that tendency to optimism and hopefulness for amelioration of the symptoms until that happy period has passed.

Another annoying question that will bob up just about the time you make the incision, is the thought that you may perhaps not be able to find the miserable organ at all. This is not a serious one, keep cool and go slow. If the organ be in the center of an abscess you may never find more than its corpse. It may be necrotic with nothing but the enclosed concretion left. Stop right there and it will be all right. If the appendix be free you will be able to feel it directly with one finger introduced or better still see it with both retractors and gauze in place. If this fails, follow the cecum and it will find it for you. Shall I irrigate? The desire to wash out the pus is hard to down, but unless you have a surely defined abscess do not do it. Even then as in empyema simple drainage is perhaps best, pack back the bowels with loose gauze and wipe out the pus gently. Always put in drainage when you have a pus accumulation, maybe in some instances this could be dispensed with, but you will sleep better if you do it and your patient will be none the worse for it. The only possible difference it can make might be in the length of convalescence and likelihood of subsequent hernia. Better for you have him alive with a weak abdominal wall than dead with a nicely closed wound. Drain with a couple of good-sized soft rubber tubes, say one-half inch in diameter, or a cigarette drain, a device that I have resorted to and the handiness of which I think far exceeds that of the gutta-percha covered gauze, is a roll of gauze over which is rolled an ordinary condum with the end cut off. Try it next time. Gauze in itself will not drain pus.

First time I saw a fecal fistula, I saw a casket at the same time and had visions of all kinds of trouble. Keep it clean and fear not, it will *surely* close in a few days. If the tube comes out it may give you trouble to put back, especially in

a child. In one fractious youth I had repeatedly to give an anaesthetic before I could satisfactorily wash out the sinus. Put a stitch through the skin and tube if necessary that will hold it. After two or three days it is well to remove the tube and it will be easy then to place it in the channel it has made for itself.

Flatulence I have found a troublesome sequel and sometimes hard to manage. Withhold food and use the colon tube. I have had one case of ileus that was, I believe, due entirely to the displacement of bowel from flatulence, anyhow starvation and the rectal tube gave gradual and finally complete relief. It is a hard proposition to be able to stand across the room and see the violent peristalsis during a paroxysm. Too early use of cathartics is to be avoided. Give opium if need for the relief of pain post operative.

In conclusion, I believe many cases of appendicitis, the majority in fact, recover without surgical interference. No one pays particular attention to the recovery of a mild case under the expectant method of treatment, all of us have had them, a false security indeed. But there finally comes the Waterloo for both the patient and the physician, sooner or later the blow will fall. One death calls forth greater adverse criticism than a hundred recoveries can ever undo and it is just these soul-racking exceptions that surgeons of wide consultation practice are called upon to witness and has fixed so indelibly in their minds, the opinions, that the best results are obtained by the removal of the organ in the early hours of the disease. Look over the literature and experience of all the master minds in the work, both surgical and medical, and you will find scarcely one dissenting voice.

The diagnosis is comparatively easy. One surgeon has said, "When in doubt operate." No doubt he has at some time been amazed to find on opening a comparatively mild case a perforated and gangrenous appendix in which waiting for certain symptoms to develop would have proved fatal. Dr. Deaver says, "The disease is so prevalent and the cases observed by every practitioner so numerous that one can but wonder at the continuous stream of pus bearing abdomens that flow into a large hospital yearly. Every physician has had one case of severe appendicitis which may have caused him difficulty in diagnosis, has referred the case to a surgeon, stood beside the table and observed a highly inflamed, perhaps gangrenous appendix removed, and yet this same physician a few months or years later, is called to see another patient in the throes of appendical colic, knows well what the disease leads to and yet gazes fascinated—as if by a rattlesnake until the right iliac fossa becomes ripe and filled with pus." Farther on the same writer states the following emphatic principle: "That in every case of appendicitis seen early, operation is indicated regardless of the mildness or severity of the attack in the absence of spreading peritonitis." Who would have the temerity to question his advice in the light of his experience and conclusive statistics: 159 acute cases between January and June, pus by the gallon, and a mortality of 5 per cent. Then why hold back?

Oschner records: 255 acute cases without perforation and five deaths; 172 with perforations, four deaths. Then wherein lies the excuse for delay? Any intelligent painstaking man can do the operation if he only will just as well as he.

Be prepared at all times, and above all do not temporize as Deaver says, "Do not stand with hands in pockets and dilly dally. Don't give calomel and call in consultants, open the abdomen and take out the trouble."

One more conclusion, do the job yourself, do not let someone do it for you in a hospital, any house is good enough to save a life in. Do it yourself and get the credit and incidentally the fee, which belongs rightfully to you.

The following fee bill was adopted, and a copy of it was sent to each member:

We, the committee appointed by your Society to formulate a schedule of prices for post-mortem examinations done for Oakland County, do hereby submit the following for your consideration:

I. For preliminary examination of dead body, including report to coroner's jury, a minimum charge of ten dollars ($10.00) shall be made.

II. For a complete post-mortem examination, including a report of the macroscopic findings to a coroner's jury, a minimum fee of thirty dollars ($30.00) for each physician employed shall be charged.

III. For attendance and expert testimony in Circuit Court, a minimum fee of twenty-five dollars ($25.00) for each day or fraction thereof shall be charged. (Signed)

WM. MCCARROLL,
N. B. COLVIN,
W. J. MCNEILL,
T. E. MCDONALD,
J. L. CAMPBELL,
C. D. MORRIS,
Committee.

M. W. GRAY, Sec'y.

Medical News.

A new journal, *"Surgery, Gynecology and Obstetrics,"* has been established and the initial number has appeared. Published in Chicago, by the Surgical Publishing Company, and edited by Dr. Franklin H. Martin, it is designed to cover the field of the three allied specialties represented by its title.

The first number contains ten original articles and the complete proceedings of the recent meeting of the American Gynecological Society, together with excellent editorials and abstracts. The form of the journal and the press work leave nothing to be desired.

Dr. Massilon Cassat has presented the Cincinnati Academy of Medicine a library of three thousand volumes on medicine and allied sciences. The development of the Michigan profession would be greatly advantaged by a large reference medical library.

New York has provided for a Hospital Jail for inebriates or drug habitues. Such may be committed by City Magistrates or Supreme Court Judges. Excise money will pay for building and site. Every city should have the privilege of such an institution. Confirmed drunkards would have a powerful bracer in the fact that on release the mere fact of drunkenness sufficed to return them to the detention hospital.

The Illinois Legislature adjourned leaving unpassed six osteopathic bills, two optometry bills and one anti-vivisection.

During 1904 three thousand men fell suddenly dead in New York City, an increase of five hundred over any previous year. During the first three months of 1905 there were seventeen hundred sudden deaths. Surely the pace that kills is set in that city.

At a dinner given in his honor, on May 2d, in New York, Dr. Osler expounded his three rules of conduct—to do the day's work well, unthinking of the morrow; to follow the golden rule, and to cultivate a certain measure of equanimity.

The total number of deaths from tuberculosis in Indiana, as reported by the State Health Board, was four hundred greater during 1904 than during the preceding year.

The last Wisconsin Legislature gave its Health Board the power to refuse to grant or to revoke licenses of physicians found guilty of immoral or unprofessional conduct.

Rush Medical College has added a fifth year to its medical course—optional for the present. Such a year spent as interne to a good hospital is greatly to be desired.

Permission was refused the City of New York to establish a tuberculosis sanitarium on the top of the Shawangunk Mountain, near Bloomingburg. Fear that their summer residence trade would be ruined dominated this action.

Dr. W. H. Sanders, of Montgomery, Ala., in a long letter to the *Medical Record* concludes that the present constitution of the American Medical Association is null and void, because unanimous consent was not obtained at St. Paul.

An Association of Laboratory Workers has lately been formed under the auspices of the New York Academy of Medicine. It proposes to diffuse scientific knowledge by public lectures from experts, and so bring the scientific and practical physicians closer together. The first course will be given during the winter of 1905-6, on Saturday evenings, at the Academy of Medicine.

At his late seventy-seventh birthday, a number of his friends gave a dinner at Delmonico's, New York City, in honor of Dr. Thomas Addis Emmet.

The Secretary of the Iowa State Board of Health has requested the physicians of that state to keep their faces cleanly shaven, lest they disseminate infection. It is strange he did not advise them to keep their entire heads cleanly shaven, for the same reason.

Mrs. Mary Stockdale, of Flint, Mich., by her will, left thirty thousand dollars to each of nine hospitals and other charitable institutions in Detroit and Buffalo.

Schiller was a physician, but neither he nor medicine reaped any benefit therefrom.

The Riforma Medica says that the people of Italy consume six tons of quinine yearly.

Baron A. de Rothschild built and equipped the first ophthalmic hospital in Paris.

The Association of Military Surgeons of the United States will meet in Detroit, September 26 to 29.

Among the important conventions that Detroit will entertain this year is that of the Association of Military Surgeons of the United States, which will hold its sessions there on September 26 to 29. This organization is an extremely important one, including as it does high officers in the medical service of the army, the navy, the public health and marine hospital service, and the medical department of the state divisions of the national guard. Recent advances in medicine and surgery have made the medical corps of the land and the naval forces of the country a prominent factor in the make-up of the service, and the value of its services has never been more generally recognized than it is now. The work now being done by the medical corps of the Japanese army and navy is an instance of the highly developed condition of modern medical and surgical practice in war.

Aims of the Association.

In general, the aims of the association are:

1. To establish military practice as a specialty.

2. To quicken the development of military medicine and surgery by the constant agitation of all topics pertaining to them.

3. To encourage mutual acquaintance between military surgeons and to promote social intercourse.

4. To establish between the medical officers of the national services and those of the State troops a reciprocal exchange of views and ideas.

5. To provide an appreciative audience, not only by attendance upon meetings, but also by reading the publications of the association, for the presentation of advances along the lines of military medicine, surgery, sanitation and equipment.

6. To create a living body of military medical literature in its publications and to stimulate thought and labor along medico-military lines.

7. To stimulate legislation beneficial to the medical departments of both national and state military and naval establishments and to forward the organization of the medical staff in the various states upon a healthy basis independent of the caprice of commanding officers.

8. To maintain an esprit de corps among medical officers, the existence of which shall insure scientific enthusiasm and unity of action in matters involving the welfare of the medical department in all military organizations.

The Officers.

The officers of the association for 1904-1905, and the arrangements committee for Detroit, are as follows:

President—Surg.-Gen. Walter Wyman, P. H. and M. H. S., Washington, D. C.

First Vice-President—Lieut.-Col. Albert H. Briggs, N. G. N. Y., Buffalo, N. Y.

Second Vice-President—Brig.-Gen. Robert M. O'Reilly, U. S. A., Washington, D. C.

Third Vice-President—Rear Admiral Presley M. Rixey, U. S. N., Washington, D. C.

Secretary—Maj. James Evelyn Pilcher, U. S. V., Carlisle, Pa.

Treasurer—Maj. Herbert A. Arnold, N. G. Pa., Ardmore, Pa.

Committee of Arrangements for 1905 Convention—Lieut.-Col. Julius F. Henkel, M. N. G., 270 Woodward avenue, Detroit, Mich.; Surg. H. W. Austin, P. H. and M. H. S.; Maj. V. J. Hooper, M. N. G.; Maj. C. M. Gandy, U. S. A.; Capt. J. E. Mead, M. N. G.; Lieut. Samuel C. Gurney, M. N. G., Secretary, 10 Adams avenue west, Detroit, Mich.

On June 14, 1905, Prof. Johannes V. Mikulicz Radecki died in Breslau at the age of fifty-five from carcinoma of the stomach. At the time of his death he was professor of surgery at the University of Breslau. Dr. Mikulicz is well known for his work in a great variety of surgical subjects and for his comprehensive knowledge of surgery and its allied branches.

Within a few days of the death of Prof. V. Mikulicz the death of Karl Wernicke was announced. He was 57 years old. In 1890 he became professor in psychiatry and neurology at University of Breslau. Within a year he had become Hitzig's successor at Halle. Wernicke's aim was to establish psychiatry on a firm scientific basis and to bring it, as far as possible, into association with brain anatomy and brain physiology.

Prof. Hermann Northnagel died in Vienna July 7, 1905, age 65 years. He was the last of these three remarkable men to pass into the great unknown.

The following is the result of the election of officers at the A. M. A. meeting at Portland on July 13, 1905: President, William J. Mayo, of Rochester; first vice-president, Surgeon-General Walter Wyman of Washington; second vice-president, A. J. MacKenzie of Portland, Ore.; third vice-president, Eugene S. Talbot of Chicago; fourth vice-president, Edwin D. Martin of New Orleans; general secretary, George H. Simmons of Chicago; treasurer, Frank Billings of Chicago; members of the board of directors, E. E. Montgomery of Pennsylvania, A. L. Wright of Iowa, and H. L. E. Johnson of District of Columbia.

Mr. Colin, a Russian experimenter, claims to have effected a stable solution of radium emanation in distilled water, from which believers in therapeutic virtues of radium hope for hitherto unattainable good results.

Miscellaneous.

CHANGE IN MEMBERSHIP.

(June 10 to July 15.)

NEW MEMBERS.

R. C. Allen, St. Joseph, Mich.
W. M. Boylan, Grawn, Mich.
S. E. Bryant, Dowagiac, Mich.
R. B. Canfield, Ann Arbor, Mich.
George Clippinger, Pipestone, Mich.
K. L. Crawford, Ann Arbor, Mich.
V. H. DeSomoskeoy, Coldwater, Mich.
G. E. Gallen, Hancock, Mich.
E. B. Gibson, Ann Arbor, Mich.
J. J. Goodyear, Ann Arbor, Mich.
C. Harris, Hillsdale, Mich.
J. J. Haviland, Lennon, Mich.
J. W. Hawkey, Harietta, Mich.
S. R. Haythorn, Ann Arbor, Mich.
W. L. Helkie, Three Oaks, Mich.
H. D. Imus, Olive Centre, Mich.
John Jackola, Hancock, Mich.
D. Johnson, Marion, Mich.
D. M. Kane, Ann Arbor, Mich.
J. Kapp, Ann Arbor, Mich.
C. E. Keeler, Ann Arbor, Mich.
T. Kimball, Fife Lake, Mich.
L. A. King, Baroda, Mich.
C. S. Lane, Whitmore Lake, Mich.
R. H. Leece, Munith, Mich.
J. S. Little, Sanilac Centre, Mich.
D. W. Loree, Ridgeway, Mich.
G. H. Lynch, Traverse City, Mich.
J. D. Mars, Ann Arbor, Mich.
J. B. Martin, Traverse City, Mich.
E. P. Mills, Holly, Mich.
C. A. Montague, Charlevoix, Mich.
P. E. Moody, Detroit, Mich.
J. F. Munson, Ann Arbor, Mich.
C. M. Myers, Dowagiac, Mich.
K. Noble, Milan, Mich.
T. W. Paton, Ypsilanti, Mich.
C. G. Parnall, Ann Arbor, Mich.
M. B. Prentiss, Hudson, Mich.
B. Rosenberry, Ann Arbor, Mich.
A. H. Roth, Ann Arbor, Mich.
C. L. Rumph, Hubbell, Mich.
C. H. Rupprecht, Calumet, Mich.
L. F. Sipher, Traverse City, Mich.
T. Sleneau, Port Huron, Mich.
G. Slocum, Ann Arbor, Mich.
F. H. Smith, Willis, Mich.
J. L. Smith, Durand, Mich.
G. E. Stripp, Ann Arbor, Mich.
C. F. Tenny, Ann Arbor, Mich.
G. H. Thomas, Holland, Mich.
E. W. Tonkin, Edwardsburg, Mich.
D. C. Urie, Ann Arbor, Mich.
J. A. Vaughan, Ann Arbor, Mich.
V. C. Vaughan, Jr., Ann Arbor, Mich.
W. G. Wright, Yale, Mich.
W. C. Wylie, Dexter, Mich.
C. R. Wilcox, Ann Arbor, Mich.
C. Woodbridge, Saline, Mich.

CHANGE OF ADDRESS.

Guy Bailey, DeSmet, Idaho.
O. F. Broman, Greeley, Col.
T. M. Buckley, Chicago, Ill.
C. Oswald Dedrick, Detour, Mich.
Mary E. Green Fiske, Tulsa, Ind. Ter.
G. E. French, Pompeii, Mich.
Mary E. Green, Tulsa, Ind. Ter.
T. C. Henry, Cowan, Ind.
D. A. Link, Marcellus, Mich.
C. L. Patton, Springfield, Ill.

BOOKS RECEIVED.

PSYCHIATRY. By Stewart Paton, M.D. J. B. Lippincott Co. Philadelphia and London. 1905.

THE PHARMACOPOEIA OF THE UNITED STATES OF AMERICA. Eighth Decennial Revision. Revised by the Committee of Revision, and published by the Board of Trustees. Philadelphia. 1905.

STUDIES IN THE PSYCHOLOGY OF SEX—Sexual Selection in Man. By Havelock Ellis. F. A. Davis Co., Publishers. Phliadelphia. 1905.

Book Notices.

Under the Charge of

RAY CONNOR.

ACUTE CONTAGIOUS DISEASES, a work embracing the careful study of nearly 10,000 cases each of Smallpox, Scarlet Fever and Diphtheria, in addition to very many cases of the other diseases discussed, namely Vaccinia, Measles, Chicken Pox, Rubella and Typhus Fever, by Wm. A. Welch, M. D., and Jay F. Schamberg, A. B., M. D., of Philadelphia. Illustrated with 109 Engravings and 61 full-page Plates.—Lea Bros. & Co., Philadelphia and New York. 1905.

This excellent work is the result of the labor of thirty-three years of Dr. Welch as physician-in-charge of the Philadelphia Municipal Hospital for Contagions and Infections, and of many years of Dr. Jay F. Schamberg, Consulting Physician to the Municipal Hospital, in a field which for extensiveness and opportunity for study and observation is vouchsafed to but few of us, and among diseases which are liable to fall to the daily task of any general practitioner of medicine in the land. There is probably no other disease in which an error of diagnosis is more fatal alike to the physician and the patient than with the acute infectious diseases; and the authors have succeeded in their endeavor to present the work in a clear and forcible style, the book abounding with illustrations from the abundance of their material.

Beginning with an instructive history of vaccination and its fruits, the technique, course, complications and injuries of vaccination are carefully described, with the nature and character of vaccinal lymph, and the relation of vaccinia to smallpox. Then follows an exhaustive study of the acute infectious diseases, smallpox, chickenpox, scarlet fever, measles, rubella, and diphtheria, with a short chapter on typhus fever, which latter disease is apt to occur along the seaport towns. With all the diseases thorough attention is given to diagnosis and symptoms to enable the practitioner to arrive at the correct conclusion; but the course of treatment is also carefully outlined, and especially in the treatment of diphtheria the mechanical and serum treatments are prominently brought forward.

It would seem that the authors have spared no trouble to place before the profession a work complete in details, embracing every practical suggestion for the hygiene and care of these acute infectious diseases.—A. P. B.

CLINICAL TREATISES ON THE PATHOLOGY AND THERAPY OF DISORDERS OF METABOLISM AND NUTRITION. By Prof. Dr. Carl von Noorden. Translated by Boardman Reed, M. D. Part VI. Drink Restriction (Thirst Cures), Particularly in Obesity. Cloth, 8 vo., 90 pages, 75 cents. E. B. Treat & Co., New York. 1905.

The historical side of restricted fluids in diseases of the blood vessels, the stomach, the heart, the kidneys, diabetes insipidus and obesity, is first considered by the author from the time of Hippocrates to the present. Oertel and Schweninger both advocate a restricted consumption of fluids to reduce fat, and have perhaps done more to make this method popular in Germany than any one else. As Van Noorden points out, however, both these authors collected their material from Bavaria, where from time immemorial more fluid has been taken with meals than almost anywhere else in the world. These patients not being accustomed to eat without drinking, voluntarily cut down their consumption of solids and so gave good results for the cure.

The studies on six cases are given in some detail, including both obese and non-obese patients. As a result of these experiments the author reaches some valuable conclusions. He finds that the water restriction neither increases nor accelerates the combustive processes going on in the organism, as has been claimed, nor does it cause the destruction of fat. The body weight is decreased as a result of the dehydration of the blood and tissues, and the total labor performed by the heart is decreased.

The book has the same neat appearance as the preceding volumes of this pleasing and instructive series. A bibliography closes the book.

SAUNDERS' POCKET MEDICAL FORMULARY. By William M. Powell, M. D., containing 1,831 formulas from the best known authorities. With an Appendix containing Posological Table, Formulas and Doses for Hypodermic Medication, Poisons and their Antidotes, Diameters of the Female Pelvis and Fetal Head, Obstetrical Table, Diet-list, Materials and Drugs used in Antiseptic Surgery, Treatment of Asphyxia from Drowning, Surgical Remembrancer, Tables of Incompatibles, Eruptive Fevers, etc., etc. Seventh Edition Revised. In flexible morocco, with side index, wallet, and flap. $1.75 net. Philadelphia and London, W. B. Saunders & Co. 1905.

This little formulary has run through six editions in a few years, and must therefore fill a void in the work of many physicians. It is neatly gotten up and not too large for the pocket, where it will be always on hand. Numerous blank pages are inserted to enable the user to add favorite prescriptions as he may desire.

Progress of Medical Science.

MEDICINE.

Under the Charge of

HARRISON D. JENKS.

Etiology and Diagnosis of Cholelithiasis.—Owing to its anatomical position, the gall bladder is especially susceptible to pathological changes. Cholecystitis must be considered in the etiology of gall stones, for they are interdependent.

Gall stones occur most frequently between the ages of 40 and 60, and in women in the proportion of 4 to 1. It is hard to account for its prevalence at the period in life, except on account of the general diminishing powers of the body causing a lessened contracility to the gall bladder; then, too, infection has a better chance in old age, but even here it is necessary to have the obstruction, or otherwise the infection would be carried away. Infection occurs in two ways, (1) through the portal circulation, (2) through the common duct. The micro-organisms most commonly found are bacteria coli communis, typhosus, staphylococcus, pyogenes aureus, and bacillus subtilis. During typhoid fever the character of the bile changes distinctly; there is an increased amount, it is watery and dirty brown in color. Such cholecystitis would tend to form a rich source of cholestrin. Two per cent. of the operable cases give a history of previous typhoid fever. The frequent presence of the colon bacillus shows also how frequent is the infection through the common duct.

Diagnosis is often very easy. Some never have any symptoms—usually a biliary colic, a pain in the right hypochondrium spreading over the whole abdomen, marked rigidity of the abdominal muscles. Vomiting is often persistent and distressing; often fever is present, but this depends upon the amount of cystic and hepatic infection. Jaundice usually appears in from twelve to twenty-four hours. Liver is usually enlarged and tender, and the spleen is swollen. As soon as the stone passes marked relief occurs. At times there is present severe purulent cholecystitis. The results here depend upon the kind of infection. If the stone becomes impacted in the cystic duct, there is a dropsy of the gall bladder (often taken for a floating kidney), acute cholecystitis, either catarrhal, suppurative or phlegmonous, with or without perforation and subsequent peritonitis.

In gastralgia the pain begins in the epigastrium near the median line, rarely if ever accompanied by chill or fever, but the patient has a neurotic history. In nervous women there is a pseudo-biliary colic precipitated by fatigue or anxiety. Often the liver is tender and enlarged, but the gall bladder is not swollen. There is no jaundice or fever, or stones in the stools.—(WILLIAM RUOFF, *New York Medical Journal,* June 17, 1905.)

Effect of Tobacco Upon the Throat.—Bosworth in his work believes that the absorption of nicotine is the vicious factor in the effect of tobacco on the throat. Langmaid believes that while much of the hyperaemia of the pharyngeal mucous membrane may be due to the smoke of burning tobacco, its poisonous effects upon the nervous system are responsible for the vaso-motor disturbances found in the throat. The smoker is never free from nasopharyngitis, and sooner or later a mild form of tracheitis appears. This shows itself by frequent hemming, or by the morning cough, often so sever as to cause vomiting. When this becomes acute, as in winter time, there is a night cough, convulsive in nature, similar to the adenoid cough of the child. Relief is obtained at once by withdrawal of smoking.—(S. W. LANGMAID, *Boston Medical and Surgical Journal,* June 15, 1905.)

Diet in Nephritis.—In acute nephritis the matter of diet is a simple one. The disease is probably due to an acute disease, probably infectious. Hence self limited, or ending in death from failure to perform its function. Here proteids must be reduced as much as possible, and all meats excluded. Carbohydrates may be added to a milk diet. Fluids should be limited, especially if there is oedema.

In chronic nephritis all strain on the digestive apparatus must be avoided, especially from the condiments, pepper, mustard and salt. Rich animal broths are likewise to be prohibited. Von Noorden has shown that red meats do not differ essentially from the white meats, but all meat should be restricted. Fats are especially nutritive and all the fresh butter and cream that the digestion will warrant should be taken.—(HENRY JACKSON, *Boston Medical and Surgical Journal,* April 6, 1905.)

NEUROLOGY.

Under the Charge of

GUY L. CONNOR.

The Cerebrospinal Fluid.—1. In cases of tuberculous and purulent meningitis, a fibrin net is seldom absent after the cerebrospinal fluid is allowed to stand six to twelve hours in the ice-box. In cases of tumor or abscess of the brain, sinus thrombosis, hydrocephalus, meningeal irritation, etc., it never forms. Wentworth even goes so far as to state that the slightest cloudiness of the fluid with the formation of a fibrin net is pathognomonic of an inflammatory exudation in the meninges and is never absent in cases of meningitis.

2. According to Comba, there constantly exists a glucose-like reducing substance (average quantity—4 to 5 centigrams in 100 Cc) in the cerebrospinal fluid drawn during life from a healthy person. In tuberculous meningitis the glucose is found in small amounts at the onset but is absent toward the end. In purulent meningitis the glucose is always absent.

3. As a general rule, it is true that a mononuclear leucocytosis goes with a tuberculous meningitis and a polynuclear leucocytosis with a purulent meningitis.

4. Cryoscopy has been found to be of no value.

5. The bacterial findings of the cerebrospinal fluid are of paramount importance giving us, when positive, an absolute diagnosis of the etiology of the disease. When negative, we can draw no conclusions.

6. The agglutination test, according to Donath, is not reliable.

7. The prognosis of tuberculous meningitis until a few years ago, was regarded as absolutely fatal. There are, however, four cases on record which have recovered.—(E. P. BERNSTEIN, *The Medical News,* June 17, 1905.)

Bromids in Epilepsy.—The writer states his object in bringing this subject before the profession is to rouse a general antipathy to the indiscriminate use of this drug in epilepsy. He believes that as a rule this drug is worse than the disease. The sum total of comfort, happiness and well-being of the epileptic would have been greater if the bromids had never been discovered. When the drug is to be employed, it should be used in small doses, combined with some of the harmless remedial agents, like antipyrin, tincture of simulo, and horse nettle, or prescribe instead of the bromin salts, some preparation of brominized oil, which is less powerful and less noxious.—(FREDERICK PETERSON, *American Medicine,* June 24, 1905.)

Meningitis.—The somewhat similar clinical symptoms of meningeal irritation in infectious diseases may be due to two fundamentally different pathological conditions, to be differentiated during life by careful study of the spinal fluid, viz., meningismus (an irritation probably due to bacterial toxins, elaborated in some organ or tissue of the body other than the meninges as in typhoid fever and pneumonia, both of which however may produce during their course a true meningeal infection) and meningitis with the infectious agent localized in the meninges.

The fluid from meningitis cases fall into two types the serous fluid (from a serous meningitis of which tuberculous meningitis is the type) and the purulent fluid (from purulent meningitis, caused by the meningococcus, streptococcus, pneumonococcus and other organisms.—(HASTINGS, *The Medical News,* June 17, 1905.)

Surgical Aids in the Treatment of Paralyzed Muscles and Their Deformities.—The author asserts the treatment of paralyzed muscles and their deformities all depends upon the stage in which the case is observed. When mechanical means have failed to restore to usefulness, such surgical procedures as tendon transplantation or arthrodesis should be employed. The following precautions, however, should be observed in tendon transplantation: 1. Careful selection of cases. 2. Before muscle grafting is performed the electric reactions should be taken to determine the strength of the muscles to be transplanted. 3. The reinforcing tendon should be as nearly parallel as possible to the one to be reinforced and it should belong to the same muscle group, although this latter precaution is not absolutely necessary. 4. Overextension at the time of suture should be avoided, as subsequently the muscle will lose its contractile power. 5. The tension of the reinforcing muscle should be estimated by pulling upon it until it shows signs of complete resistancy. 6. Silk sutures should be used and the muscles quilted together firmly. 7. Strict asepsis should be observed during the operation.—(S. D. HOPKINS, *American Medicine,* July 1, 1905.)

SURGERY.

Under the Charge of

MAX BALLIN.

Surgical Aspects of Gallstone Disease.—J. Wiener, Jr., says that the ideal method of handling doubtful cases of gall-gladder disease is to treat them medically during a few attacks. If one or more small stones are passed, followed by relief of the pain, then an operation is not indicated, because nature may effect a cure, but if one or more severe attacks of colic are not accompanied by the passage of any stones per anum, then an operation is indicated, and indicated long before there has ever been any jaundice. In discussing the symptomatology of the disease and the methods of making an early diagnosis, especial emphasis is laid on the fact that jaundice is a very inconstant symptom, as it is absent in 80 per cent. of gallstone attacks and is but rarely due to an obstructing stone in the duct. To carry out a rational plan of treatment it is necessary to determine the location of the stones and the degree of inflammation present, and careful individualization is necessary. The analogy to appendicitis is very striking, and just as the mortality of that disease has been greatly reduced by an appreciation of the necessity for early operation, the same reasoning must be applied to gallstone disease. Early operation saves the patient much pain and the dangers of suppuration, cancer, and peritonitis. A cholecystectomy done early is not much more dangerous than an interval appendectomy, whereas stone in the common duct is dangerous not only on account of the difficulty of removing it, but also of the resulting cholangitis with its sequelæ. The whole trend of modern progressive surgery is towards the removal not only of the gallstones, but also of the diseased organ in which they develop, the gall-bladder. Primary cholecystectomy is to-day the operation of choice in the large majority of cases of gallstones. The reasons for this are manifold: (1) The mortality is very small, lower even than after cholecystotomy. (2) The wound heals much more rapidly. (3) There is no danger of recurrence, either of the cholecystitis, or of the formation of new stones. (4) No secondary operations are necessary.—(*Medical Record,* July 8, 1905.)

Apparently Unavoidable Errors in Diagnosis of Psoas Abscess.—H. Augustus Wilson (Philadelphia) cites enough instances to show that the diagnosis of psoas abscess is not always easy, and that each case is worthy of the most careful study in every phase presented. The presence of well-marked evidence of spinal caries is sometimes misleading. Great spinal deformity is often present long after the activity of the bone disease has subsided. When conditions more or less closely resembling psoas abscess are also present, the preponderance of evidence is often in favor of psoas abscess when in reality some other disease or condition is present. The knowledge that these errors in diagnosis have occurred under the most critical inspection and elaborate study is convincing that while they are not always avoidable, they should be guarded against as far as possible.—(*American Medicine,* July 8, 1905.)

Ethyl Chlorid Anesthesia in Otologic Surgery.—E. H. SCHILD, Baltimore *(Journal of the American Medical Association,* July 8), advocates the freezing of the parts with ethyl chlorid in operations on the membrana tympani and external auditory canal. Practical experience, he says, has demonstrated that the danger and inconvenience that might be feared do not exist, and that the subsequent course of cases in which this method of treatment is employed is not different from that in cases in which ethyl chlorid has not been used. He uses for the ethylchlorid anesthesia a specially constructed nozzle, very slender, about two inches long and attached to the metal container at an angle so as not to interfere with the view of the parts. By this a very fine spray, not a jet, is easily directed to the desired spot, beginning with one that is almost imperceptible and gradually increasing its volume and hastening the evaporation by means of a jet of air blown into the canal from a Politzer bag. He usually shuts it off as soon as any aching pain is felt by the patient, and then blows in a little more air and proceeds at once to operate. He has recently begun using this method as preliminary to the application of Lucae's sound in the treatment of chronic otitis media, and finds it an ideal way to avoid pain, and states that it is apparently followed by a better percentage of improved cases. This, however, needs, he says, a fuller confirmation by experience, which he hopes to report at an early date.

GYNECOLOGY AND OBSTETRICS.

Under the Charge of

B. R. SCHENCK.

Pernicious Vomiting of Pregnancy.—A valuable article on this subject is contributed by Williams to the newly inaugurated journal—*Surgery, Gynecology and Obstetrics.*

Williams' attention was particularly directed to this question, when he lost a patient four days after the induction of labor, the operation having promised a satisfactory outcome. The symptoms suggested an acute toxaemia, and the autopsy revealed the characteristic lesions of acute yellow atrophy of the liver. Within a year, the author induced abortion, for the same cause, in five other cases. Two of these died, one at the third month and the other at the seventh, both with jaundice and diminution in the size of the liver, as in acute yellow atrophy. These cases are made the basis of the contribution.

Excluding all cases in which the vomiting results from lesions outside the generative tract, and hence independent of the pregnancy, there is available evidence to justify the division of the etiologic causes into the following groups: (1) Reflex, (2) Neurotic, (3) Toxaemic.

(1) *Reflex.* The vomiting is due to the presence of abnormalities, such as displacement of the uterus, ovarian tumors, endometritis or abnormalities of the ovum, as hydatidiform mole, hydramnios, and sometimes twin pregnancy. These are discussed in full.

(2) *Neurotic.* Since Kaltenbach's paper (1890), many writers have held that a neurosis is the principal cause. This view is too extreme and should be held only after excluding organic lesions and demonstrating the absence of toxaemia by a most thorough examination of the urine.

(3) *Toxic.* First suggested by Fischel (1884), this conception has taken a more and more prominent position. The toxin has been referred to the corpus luteum, ovary, intestine, liver and placenta, and an attempt made to identify the condition with eclampsia and acute yellow atrophy. Both Stone and Ewing have attributed it to the disturbance of the hepatic function, and Williams believes that at least a portion of the toxic cases will show lesions identical with those of acute yellow atrophy. Arguments are set forth in support of this view.

Although we are ignorant of the exact nature of the toxic substances, it is natural to suppose that they are metabolic in origin and directly connected with the pregnancy. Whether derived from the mother, fetus or from both cannot be decided.

The excretion of ammonia is then considered, the writer holding that a marked increase in the ammonia output, in women suffering from pernicious vomiting, indicates the existence of a serious toxaemia, which, if allowed to continue, will be accompanied by lesions of the liver and other organs, inconsistent with life. Accordingly, abortion should be induced as soon as the condition is detected. On the other hand, in the reflex and neurotic forms, the ammonia excretion is normal, so that the determination of this affords not only a means of differential diagnosis, but also a valuable guide as to the treatment.

Williams believes that there are at least two toxaemias of pregnancy (perhaps more), one giving rise to the vomiting of pregnancy and the lesions of acute yellow atrophy, and the other to eclampsia. This conviction is founded on the careful study of the pathological anatomy, clinical observation and the study of the metabolism. In both, necrotic changes occur in the liver and kidneys, but are totally different in character. These are described.

Chemical examination of the urine shows an equally marked contrast betweeen the two conditions. In eclampsia, the total amount of nitrogen is greatly diminished, while the ammonia coefficient remains practically normal. In vomiting, on the contrary, in spite of the scanty amount of urine, the amount of total nitrogen remains approximately normal, while the ammonia coefficient is wonderfully elevated. Generally speaking, it may be said that a high ammonia output is a favorable prognostic sign in eclampsia and a very ominous one in vomiting.—(*Surgery, Gynecology and Obstetrics,* July, 1905.)

Typhoid During Pregnancy.—Hicks and French, of London, discuss three questions, as follows:

A. Are typhoid bacilli transmitted from mother to fetus? In ten cases, where the abortion occurred late in the disease, the bacilli were found in the blood or organs of the fetus. In eleven cases of abortion at an earlier period of the fever, the organisms were not found. This brings up the question as to whether, with a viable fetus and an early diagnosis, labor should not be induced as early as possible in order to save the child from infection.

B. What is the effect on the disease? The pregnancy does not alter the prognosis or change the course of the fever.

C. What is the effect on the pregnancy? The prognosis as to the termination of the pregnancy is bad. Abortion or premature labor takes place in the majority of cases. Delivery is usually easy and involution is natural. The fetus, if viable, is often born dead or dies soon after delivery.—(*Lancet,* June 3, 1905.)

DERMATOLOGY, SYPHILIS AND CUTANEOUS RADIOTHERAPY.

Under the charge of

A. P. BIDDLE.

Dermatitis Seborrhoica and Its Relations to Alopecia and Other Conditions.—L. D. Bulkley reviews his experiece with dermatitis seborrhoica in private and clinical practice and concludes that it is an eruption that should be recognized, since it forms about one-tenth of the cases which come to a dermatologist. Both sexes are affected in about equal proportions, and though observed at all ages from one year to eighty-nine years, it is mainly a disease of middle life, almost fifty-three per cent. of the cases occurring between the ages of twenty and forty. Combining the statistics of alopecia and dermatitis seborrhoica, it appears that in 557 out of 880 cases, or sixty-three per cent., the loss of hair was due to the latter condition. Although the exact nature of the causative agent is undetermined, enough has been learned to establish pretty clearly that dermatitis seborrhoica in all its forms is more or less contagious, and that very much of modern baldness is caused thereby, and therefore is of parasitic origin. Its development is, however, undoubtedly favored by the various elements which lower the vitality and render the skin more susceptible to operation of such local agencies. The differential diagnosis from psoriasis, ringworm, pityriasis rosea, syphilis and eczema is discussed, and the author describes his method of treatment which consists mainly in the application of various combinations of resorcin, sulphur, salicylic acid, carbolic acid, formalin, etc. In this connection, he says that proper local treatment is all essential, but for the best results a certain amount of reconstructive treatment is necessary, that the skin may not furnish such a suitable ground for the growth of the microorganisms found in it, and believed to be of etiological moment.—(*Medical Record,* May 13, 1905.)

The Present Status of Kontgen Ray in Therapy in Dermatology.—J. H. Comroe (Philadelphia) concludes (1) radiotherapy must not be considered a panacea. Although it has a large field of usefulness, it also has its limitation and dangers. (2) Most consistently good results are obtained in epithelioma, rodent ulcer and acne. (3) Great benefit may be looked for in eczema, chiefly the vesicular variety affecting the hands, sycosis, tinea tonsurans, verruca, lichen planus, naevi and port-wine marks, localized pruritis, favus, etc. (4) Deepseated epitheliomas with the exposure of bone, cartilage, etc., appear to do well for a while, but usually get worse eventually. The judicious combination of radiotherapy and operation is highly recommended in these cases. (5) The Roentgen rays are beneficial when pain particularly is to be avoided, as in old, feeble people. (6) Radiotherapy produces the best cosmetic results. (7) Recurrences arter radiotherapy are less frequent than after other methods, and are more amenable to re-application of the rays. (8) The high-vacuum tube is preferable in epithelioma, rodent ulcer and lupus; the medium and soft tube being employed in other cases. (9) Radiotherapeutic treatment should be instituted as soon as possible, the result usually being in direct proportion to this factor. (10) Epithelioma of the skin usually reacts better than that involving the mucous membranes.. (11) Tampering with caustics and other irrational forms of treatment are to be condemned as measures preceding radiotherapy since they undoubtedly unfavorably alter the prognosis in such cases. (12) No rule can be laid down for the prevention of burns, etc.; hence the dosage must be carefully regulated in each individual case. (13) No protective powders, ointments, etc., must remain on the parts treated, since they may prohibit or lessen the effect of the rays by interfering with their passage.—(*American Medicine, June* 17, 1905.)

A Case of Menstrual Urticaria.—D. J. M. Miller epitomizes the literature of this condition and describes its occurrence in a girl of fifteen, who menstruates regularly and whose attacks of urticaria make their appearance seven or eight days before and cease two to three days before, each period. Occasionally the urticaria persists until the flow begins, rarely during the first day or two of its course. During the intervals between the periods the patient is quite free from attacks and she is perfectly healthy in other respects. The urticaria itself is of the ordinary type.—(*Medical Record,* May 13, 1905.)

THERAPEUTICS AND PHARMACOLOGY.

Under the Charge of

W. J. WILSON, JR.

Treatment of Neurotic Heart.—Proper, sufficient alvine evacuations are most essential to permanent well being. To attain this at times is almost impossible, and we are obliged frequently to modify habits and recur to fresh prescriptions. Some preparation of aloes (preferably aloin) and the sulphate of soda in hot water at bed time have been found very useful by me. The diet of course should be regulated, and sugars and starches reduced to a minimum. Whenever there is a suspicion of rheumatic or gouty condition, so called, the most valuable remedy is salicin. Massage treatment made use of daily is often largely instrumental in helping such patients toward a cure. The different preparations of ammonia, notably the aromatic spirits, and the valerianate, are quieting and useful whenever the nervous symptoms are especially annoying and threatening. If the concomitant organic cardiac changes are marked, small doses of digitalis and nitroglycerin, combined and frequently repeated, work wonders occasionally. Whenever we have to do with true angina pectoris as subsequent events prove to be the case, no medicine or treatment will cure, or even appreciably relieve. At times strychnine in moderate doses and combined with pepsin and bismuth, has appeared to be useful. The use of iron for the condition of secondary anæmia, has seemed almost inert, and the blood condition, whatever the precise cause of its impairment in lowered haemoglobin, specific gravity, and color index, and moderate increase of leucocytes has not improved. The evidences of slight cardiac enlargement, with or without apparent dilatation of the cavities, has remained about, if not wholly, the same during months and years of observation. I believe in some instances we obtain permanent good effects from the prolonged use of the glycerophosphates of lime and soda, combined or not with tola and calicaya. No drug has the same value at times in the control of the neurotic heart as coca. The great difficulty is to obtain an officinal preparation which has any real value. I should not advise the too long or frequent use of coca in this condition. It is more particularly as a temporary help that it should be used. In some instances frequently repeated doses of tincture of strophanthus are temporarily even more rapidly and evidently beneficial than coca. Finally, I would add that judicious use of a few antiseptic drugs, notably wood charcoal (Bellocque's), salts of bismuth, creosote, and the mineral acids, is extremely valuable whenever faulty metabolism from the stomach or intestines is clearly made out. The following prescription borrowed from Gibson is doubtless very useful at times for the flatulence of organic or functional angina:

℞ Sp. ammonii aromat, m xv.
Sp. aetheris comp.
Sp. chloroform, āā m. x.
Sod. bicarb., gr. x.
Ag. menth. pip., ℥j.

—(BEVERLY ROBINSON, *The American Journal of Medical Sciences,* June, 1905.)

Chronic Poisoning by Acetanilid.—That chronic poisoning characterized by degenerative changes in the blood, and by physical disability, may result from the continued ingestion of anilin derivatives is well known, as it is also well recognized that acetanilid, one of these products, because of its small cost and its toxicity in excess of others of this group in common uses, renders it particularly liable to be the offending agent. Acetanilid is the chief ingredient in headache powders so generally dispensed by pharmacists without prescription, as it is in certain nostrums both in use by the rank and file of the profession, and, unfortunately, thus introduced by them to the laity.

I have under observation a man, aged 40, of splendid physical development, who recently consulted me concerning his digestion. There were loss of cardiac tone, a sallow, peculiar dusky hue of the skin, and anorexia. Inquiry elicited the fact that for two or three years his habit had been to take headache powders. The blood as it stood on the ear, showed the characteristic cholocate hue indicating the presence of methemoglobin. Inspection showed moderate variation in size and shape of erythrocytes. These were 3,860,000 per cubic centimeters; the leucocytes, 9,200. There was, therefore, a pathologic leucocytosis, and a diminution in the erythrocytes, the cause of which, an acetanilid toxaemia, was not hard to seek, other factors being excluded by careful inquiry.—(STEWART, *Journal A. M. A.,* June 3rd, 1905.)

BACTERIOLOGY AND PATHOLOGY.

Under the Charge of

H. S. OLNEY.

Spirochaetae of Syphilis.—Anything which tends to clear up the question of the etiology of syphilis is, of course, of great importance and value. The successful inoculation of monkeys with syphilis was a big step forward, but the recent work of Schaudinn and Hofman bids fair to place this disease among those of known etiology. In their communication in the *Deutsche Medische Wochensft,* they claim to have found the specific germ, which they call the spirochaeta pallida, in eight cases of syphilis. They made smears from the inguinal glands or from the gland juice obtained by puncture, and, after fixing in absolute alcohol, they stained in Giemsa stain, which is a mixture of Giemsa's eosin solution and of azure. This method takes from sixteen to twenty-four hours, but another method, used by Metchnikoff and known as Marino's modification of Giemsa stain, takes only about fifteen minutes. This is a mixture of a methyl alcohol solution of azure blue with a weak aqueous solution of eosin.

Schaudinn and Hofman found two varieties of spirochaetae in syphilitic lesions—one with close coils, almost transparent, very motile, and with both ends tapering to points. This is known as the spirochaeta pallida. The other is larger, takes the stain better, and the coils are looser. This variety is found only in the more superficial lesions, while the pallida is found in both superficial and deep portions of the primary and secondary lesions.

Neither form has been cultivated artificially as yet.

Since this first communication, confirmatory work has been done by Metchnikoff, who reported finding spirochaeta pallida in eight cases out of twelve examined—four cases being in monkeys which had been successfully inoculated with syphilis, and four cases in young men with acquired syphilis.

Buschke also found the spirochaeta pallida in large numbers in the spleen and liver of a four-months-old baby with inherited syphilis.

C. Fraenkel and Lehmann and several others have also found this spirochaeta in lesions of hereditary and acquired syphilis, and nowhere else. So one is justified in being rather optimistic as to the validity of the claims of the discoverers. Thanks to the success of the experiments on the inoculation of monkeys with syphilis, a susceptible animal has been secured, and the four rules of Koch may eventually be complied with.

Tuberculosis of Mesenteric Glands.—Rosenberger's conclusions are based on the findings in 49 cases where tuberculosis existed in some part of the body. In 25 of these cases bacilli were found in spreads made from the glands, and yet 36 per cent. of these glands showed no gross evidence of tuberculosis. In 24 cases the bacilli could not be demonstrated, and 87½ per cent. of these cases showed no gross evidence of tuberculosis in the glands, yet over 93 per cent. produced tuberculosis in guinea pigs when inoculated. His conclusions are as follows:

1. In all cases of active tuberculosis, and in almost all cases of inactive tuberculosis, the mesenteric glands are tuberculously infective.

2. The mesenteric glands in these cases may or may not show gross evidence of tuberculosis or of tubercle bacilli in spreads; the result is the same as far as the qualitative production of tuberculosis is concerned.

3. The mesenteric glands in a certain percentage of cases showing no tuberculous lesions in any part of the body are tuberculously infective. In his cases the percentage was 40.

4. The tuberculous infectivity of the mesenteric glands is probably shared by the other groups of lymph nodes throughout the body.—*(American Journal of Medical Sciences,* July, 1905.)

Cytotoxins.—Woltmann's conclusions:

1. The cytotoxins are not specific.

2. The changes occurring after the injection of different cytotoxins are similar and do not vary in kind.

3. The changes do, however, vary in degree.

4. Nephrotoxin causes the most specific change.

5. The hemolymph glands play some important part in the production of eosinophiles. The hemolytic action of hemolymphotoxic serum is greater than that of other cytotoxic sera.

6. The histological changes which are observed in every case are secondary to the hemolytic factor present in all cytotoxic sera.—*(Journal of Experimental Medicine,* April 25, 1905.)